



Women Leaders Meeting
in Kilifi, Kenya.

ODF SUSTAINABILITY STUDY

Paul Tyndale-Biscoe | Matthew Bond | Ross Kidd

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ABBREVIATIONS

ANO	Australian National Office (of Plan)
CLTS	Community Led Total Sanitation
CLTSH	CLTS plus Hygiene
DoH	Department of Health
DRR	Disaster Risk Reduction
DU	Development Unit
EHO	Environmental Health Officer
FGD	Focus Group Discussion
GPS	Global Positioning System
HH	Household
HWF	Hand Washing Facilities
IDS	Institute for Development Studies
IEC	Information Education & Communication
M/F	Male/Female
MDG	Millennium Development Goals
NB	Never Broken down
NR	Never Repaired
NGO	Non Government Organisation
NLNO	Netherlands National Office (of Plan)
OD	Open Defecation
ODF	Open Defecation Free
PHAST	Participatory Hygiene and Sanitation Transformation
PLWD	People Living with Disability
PLWHA	People Living with HIV and AIDS
PU	Program Unit (of Plan)
R	Repaired
R&A	Repaired and Abandoned
RESA	Southern Africa Regional Office (of Plan)
RWASH	Rural Water, Sanitation and Hygiene
SanMark	Sanitation Marketing
UKNO	United Kingdom National Office (of Plan)
VIP	Ventilated Improved Pit (latrine)
WARO	West Africa Regional Office (of Plan)
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation

EXECUTIVE SUMMARY

This report details the results from a study of factors affecting the sustainability of open defecation free (ODF) status in rural villages following Community-Led Total Sanitation (CLTS) triggering. It investigated results in CLTS programs operated by Plan International in four countries in Africa—Ethiopia, Kenya, Uganda and Sierra Leone. Data was collected in 4960 households in 116 villages where CLTS had been triggered and communities declared ODF two or more years before the study commenced. Analysis of the findings sought to answer three questions:

1. What percentage of households had remained ODF?
2. What were the primary causes of households reverting to open defecation (OD)?
3. What motivated people to remain ODF?

The study was initiated and sponsored by Plan International. It was conducted by FH Designs, an Australian-based consulting firm, with field work carried out in 2012.

BACKGROUND AND METHODOLOGY

Plan International was an early adopter of the Community Led Total Sanitation (CLTS) approach and has been implementing CLTS programs in Africa since 2002. In 2011 Plan Netherlands commissioned a comprehensive review of CLTS reflection papers and evaluations of programs in Africa and Asia and concluded that there had been very little systematic investigation of the sustainability of CLTS programs. As a result, Plan Australia, Plan Netherlands and Plan UK agreed to provide funding for a study of the factors that affect the sustainability of open defecation free (ODF) status of villages and households. Plan contracted FH Designs to conduct the study. The four countries selected were chosen due to their having sufficient numbers of villages that had been declared ODF two or more years prior to the study.

Design of the study commenced with an Inception Workshop in Accra, Ghana, in March 2012 with participants comprising Plan program staff from each of the four countries, FH Designs consultants and two of the study's three peer reviewers. The overall approach was developed and a long-list identified of nearly 200 factors that participants thought may influence whether households remain ODF. Workshop participants agreed to adopt a two-stage process for data collection. The first phase — re-verification, conducted between May and June 2012 — reassessed the status of as many ODF-declared villages as possible in each of the four countries. Nearly 5000 households in 116 villages were inspected by teams of enumerators and re-assessed according to the original ODF verification criteria for each country. Observational data about latrine status, condition and use were collected during this phase. The re-verification data predominantly responded to Research Question 1.

Data collected during the re-verification phase were also used to select the villages and households targeted for more detailed investigation in the second phase of the study. Stratified random sampling was used to select households from three village types termed *Practicing*, *Medium* and *Weak ODF* communities in accordance with the proportion of

households in the village that had functioning latrines at the time of re-verification. Around 1200 households in 72 villages were selected for Phase 2.

The Phase 2 methodology investigated the range of factors that influenced the decisions within households to either maintain/retain their latrines or to abandon them. A pre-defined list of factors was prepared¹ (based on the long-list from the Ghana workshop) and an innovative 'Latrine Timeline Tool' developed to elicit this information in a way that did not lead respondents. Enumerators were trained to facilitate the household to prepare a timeline of their latrine from triggering and use it to guide a discussion about household decision making at key times (latrine collapse, repair, etc.). Factors identified by households were noted and then ranked in terms of significance for decision making (men and women ranked separately). Supplementary data was collected by enumerators through observation of each household's latrine and a household questionnaire. The timeline and factor analysis process was replicated at the village level by separate groups of female and male community leaders.

The households and village data collection processes were piloted in Uganda, resulting in some refinement of the methodology. Phase 2 data collection was then carried out during August – September 2012 and the resulting data set uploaded to a database for cleaning and analysis. To answer Research Questions 2 and 3 qualitative and quantitative analysis was done of the factors nominated by households and villages. The survey and observational data were then used to supplement this analysis and gain further insight into the factors and household behaviour.

RESULTS

Re-verification – what percentage of households are still ODF?

The re-verification data found that 87% of the 4960 Phase 1 households still had a functioning latrine. If ODF status is equated with a household having a functioning latrine then the study found that the rate of reversion (or 'slippage') was just 13%.

A range of criteria, however, were used in each country to originally award ODF status for a village. These varied slightly between countries but in all countries each household was expected to have:

- A functioning latrine with a superstructure
- A means of keeping flies from the pit (either water seal or lid)
- Absence of excreta in the vicinity of the house
- Hand washing facilities with water and soap or soap-substitute such as ash
- Evidence that the latrine and hand washing facilities were being used (e.g. a well-trodden path)

If all these criteria are applied to the Phase 1 data then the reversion rates increase dramatically. Eight percent of households with a functioning latrine had visible signs of open defecation around the house indicating that OD was practiced at these households and the

¹ The full list of factors is set out in Table 3, Section 3.2.1

overall reversion rate was at least 21%. With respect to hand washing facilities and the presence of soap or ash, only 37% and 25% of households respectively complied. Similarly, adding in the presence of a lid, and the presence of a lid over the hole, reduces the ODF rate to 26% and 19% respectively (virtually all latrines in the study were simple pit latrines – only a handful of households had VIP or pour flush latrines). If all five of these criteria are applied then the overall slippage rate across the study was 92%.

The results varied from country to country and between Program Units (PU) within countries. On the basis of just the presence of a latrine, Ethiopia has been the most successful with reversion rates of just 8%. Kenya has the highest reversion rates on this basis – around 22% overall – with the other two countries hovering around the average. However on the basis of the more stringent criteria, the picture changes with Jimma in Ethiopia having very low numbers of latrines with hand washing facilities (HWF) – and consistent rates around 62% in all other PUs. Tororo was the most successful at promoting improved hand washing behaviour resulting in a reversion rate of 75%; Kenya was next at around 83% and Ethiopia and Sierra Leone both recorded about 90% reversion.

So whilst Plan CLTS programs have been quite successful overall at getting households to build – and retain – latrines, they have been less successful at achieving improvements in hygiene behaviours. In particular, the programs have not resulted in households continuing to maintain hand washing facilities supplied with water and soap/ash.

Phase 2 – What are the primary causes of households reverting to OD and what motivates people to remain ODF?

The study considered two types of factors—motivators and facilitators—for both ODF and OD households. For the purposes of Phase 2 analysis, ODF households were defined as those that still had a functioning latrine and OD households those that had abandoned their latrine at the time of the data collection. Motivating factors (and their inverse – de-motivating factors) were the psychological drivers that caused people to keep or abandon their latrine. Facilitating factors (divided into positive ‘enablers’ and negative ‘barriers’) are the environmental or physical issues that make it easier or harder to build or maintain a latrine. Phase 2 data analysis identified the numbers of times different factors were mentioned during household interviews. The study’s 22 motivating (and de-motivating) factors were mentioned a total of 4372 times. The 13 facilitating (and de-facilitating) factors were mentioned a total of 3463 times. In-depth analysis focussed on each factor that accounted for at least 10% of the total factors mentioned in their category. The most important factors are set out in the table below.

ODF Households	OD Households
Motivators	De-motivators
Health (22%) Shame, Disgust, Pride (18%) Privacy, Security (12%) Convenience, Comfort (12%)	Financial Constraints (18%) No more support (18%) Inconvenience, Discomfort (14%) Maintenance, Repairs (13%) Share with others (12%)
Enablers	Barriers
Availability of Land, Materials, Labour (28%)	Availability of Land, Materials, Labour (32%)

Technical Advice, Knowledge (16%)	Local Soil & Ground Conditions (25%)
Local Soil & Ground Conditions (16%)	Technical Advice, Knowledge (13%)
Affordability (15%)	Availability of Water (13%)
Availability of Water (13%)	Quality of Initial Construction (11%)

Each of these were further analysed to probe a little deeper into and investigate the significance of the factor and what it might mean for practice. These are set out in the table below.

ODF Households	
Motivating Factors	Health Description of Factor: The extent to which users perceived that health is improved by using a latrine and hence worth the effort to build or maintain. Includes improving the health of family members, particularly children. Summary of Results/Analysis: <ul style="list-style-type: none"> • Health was the most commonly nominated factor overall as well as by men and women. • Households linked latrine use with a reduction in the incidence of diseases as well as savings through having to go less often to the clinic. • It seems that perceived or real health benefits from latrine use are a significant motivator for continued use. • Households nominating this factor – as well as ODF households - had a better knowledge of the importance of hand washing. However this varied geographically, with Kenya and Sierra Leone showing less correlation, suggesting a variation in the way hygiene promotion is done.
	Shame, Disgust, Pride Description of Factor: Motivation arising from a sense of shame or disgust either at the thought of ingesting excreta or being observed defecating; and conversely, a sense of pride in having access to or being able to use a latrine and hence not ingesting excreta or being observed defecating. Summary of Results/Analysis: <ul style="list-style-type: none"> • The negative emotions of shame and disgust are more prevalent than the positive ones such as pride, respect and dignity. • They tended to drop away over time, which suggests they are good initial motivators but less so as time progresses.
	Privacy, Security Description of Factor: Satisfaction with a latrine providing a location that is both private (i.e. free from observation by others) and secure against threats of harm that arise when defecating in the open (from animals, insects and other people) Summary of Results/Analysis: <ul style="list-style-type: none"> • The main issue with this factor seems to be the protection a latrine affords from snakes and insects. • Despite issues around privacy during menstruation, dangers of attack when going to defecate in the bush, and lack of privacy generally, this does not appear to be a gendered issue, with both men and women rating this factor equally.
	Convenience, Comfort Description of Factor: Motivation arising from a latrine providing greater ease of access for defecation and comfort when defecating when compared to open defecation. Summary of Results/Analysis: <ul style="list-style-type: none"> • The comfort associated with not having to go to the bush to defecate, particularly at night or when it is raining is the main theme emerging from this factor. • To a lesser degree, providing facilities for guests, and not having to share with neighbours, are

also valued.

Availability of Land, Materials and Labour

Description of Factor:

Ready availability of land, materials or labour making it easy to maintain or rebuild latrines when required

Summary of Results/Analysis:

- The availability of free bush materials is the most significant component of this factor. Free and freely available land is also significant.
- Freely available labour from family also appears to be important, although households do recognize the need to pay for (skilled) labour at times
- An analysis of latrine construction materials confirmed that more durable materials resulted in latrines being less likely to need rebuilding.

Technical Advice or Knowledge

Description of Factor:

Availability of technical advice or expert knowledge about how to build or maintain good quality, durable infrastructure

Summary of Results/Analysis:

- ODF households appear to have received and made use of technical advice
- Advice has been received from both within communities – from artisans and contractors - and externally (Plan, health extension workers etc.).
- Households have received a range of advice relating to all aspects of their latrines, as well as general encouragement to use and maintain them.

Local Soil and Ground Conditions

Description of Factor:

Aspects of the local ground conditions that either made digging a pit easier (e.g. soft soil) or was self-supporting and hence minimised the requirement for lining of pits

Summary of Results/Analysis:

- Ground conditions as an enabling factor predominately relate to how easy the soil is to dig, or how self-supporting the ground is.
- Poorer performing villages (Type 3) tended to have a higher incidence of soft soils, making them easier to dig, but more likely to collapse.

Affordability, Cost

Description of Factor:

Availability of sufficient funds to purchase any necessary material or labour and a willingness within the household to spend money on these items.

Summary of Results/Analysis:

- ODF households are clearly motivated to procure materials, with the majority spending money to do so (as opposed to getting local materials for free).
- Mechanisms for obtaining money are working, selling goods or produce or getting money from family. Credit schemes do not feature, and receiving financial assistance from the broader community does not happen.

Availability of Water

Description of Factor:

Reliable source of water in close proximity making the construction, repair and cleaning of latrines easier.

Summary of Results/Analysis:

- Water supply as an enabler relates to water for construction/repair, or water for cleaning and hand washing. There were virtually no pour flush latrines in the study.
- Access to water was found to be a significant enabler for both latrine construction during initial building, as well as latrine cleaning and hand washing once the latrine is operational.

OD Households

De-motivating Factors

Financial Constraints

Description of Factor:

De-motivation caused by the cost of building or continuing to use a latrine, including costs of repairing or maintaining it.

Summary of Results/Analysis:

- Lack of money/funds was the most common aspect mentioned in the comments about this factor (61% of comments)
- Amongst all 52 villages included in Phase 2, subsidies were only provided in one village (in the form of materials), so there was no influence of subsidies on household perceptions.
- Households nominating this factor spent the same as other OD households on building their latrines.
- Households that never repaired their latrine are slightly over-represented
- This factor was more important for women than men, but not over-represented in female headed households

No More Support

Description of Factor:

Reversion to OD because of a sense that households had not continued to receive support to maintain or improve their latrine from within their community (rather than support from outside the community).

Summary of Results/Analysis:

- This factor relates to family and community rather than external support from Plan or Government
- It seems to be a gendered issue – women rated it more highly than men and it was over-represented in female headed households
- The survey results suggest community cohesion plays an important part, with households in Type 1 villages twice as likely to have received community support with their latrines than Type 3 villages.

Inconvenience, Discomfort

Description of Factor:

Perceptions of inconvenience or lack of comfort associated with using a latrine; other negative perceptions of latrine use such as lack of privacy; or ease of OD.

Summary of Results/Analysis:

- The majority of comments mention the proximity and so convenience of using the bush for defecation.
- Poor quality and/or failing latrines were the cause of any discomfort expressed in the comments
- Responses were not strongly gendered
- It is unclear whether poor quality latrines cause people to revert to the bush, or the proximity of the bush lures people away from latrine use.

Maintenance, Repairs

Description of Factor:

De-motivation caused by the effort and cost involved in carrying out ongoing maintenance and repairs, including rebuilding and/or emptying of pits.

Summary of Results/Analysis:

- From the timeline data, 32% of total households had carried out some repairs (41% of ODF households and 21% of OD households)
- Lack of money/funds was the most common aspect mentioned in the comments about this factor (61% of comments)
- Amongst all 52 villages included in Phase 2, subsidies were only provided in one village (in the form of materials), so there was no influence of subsidies on household perceptions.
- Households nominating this factor spent the same as other OD households on building their latrines.

- Households that never repaired their latrine are slightly over-represented
- This factor was more important for women than men, but not over-represented in female headed households.

Shared with Others

Description of Factor:

De-motivation arising from sharing a latrine with another household.

Summary of Results/Analysis:

- Sharing often took place with family members or neighbours and this seemed to be a motivation for not building or repairing a household's own latrine rather than driving people to return to OD.
- Sharing of latrines appears to be more accepted in some locations than others (e.g. Uganda)
- In Sierra Leone, most people who share a latrine seem unhappy to do so and have returned to OD

Availability of Land, Materials and Labour

Description of Factor:

Lack or limited availability of land, materials or labour making it difficult to maintain or rebuild latrines when required

Summary of Results/Analysis:

- This issue was more about materials and labour than land
- Lack of availability of free materials and labour appears to have resulted in households having to purchase these, which is a significant barrier. The results confirm that in some cases, the circumstances within individual households have changed
- This is clearly an issue of more importance to women than men.

Local Soil and Ground Conditions

Description of Factor:

Aspects of the local ground conditions that either made building a latrine difficult (e.g. rocky soil) or prone to collapsing (e.g. soft soils or areas prone to flooding).

Summary of Results/Analysis:

- Soft soils that collapsed easily were a major problem for OD households.
- Initial perceptions about the benefits of soft soils being easy to dig gave way to concerns about them collapsing too readily.
- Women were much more likely than men to nominate and prioritise this factor.
- Analysis of soil types from the household surveys showed that OD households were more likely than ODF households to experience soft, easy to dig soils and rocky soils that were hard to dig; and less likely to experience hard, self-supporting soils.
- Collapsing soils were identified equally amongst OD and ODF households, suggesting that the response to collapsing soils is an attitudinal issue.
- OD households were more likely than ODF households to experience flood-prone soil or have pits affected by high water tables—issues that are not easily dealt with by households using locally available materials.

Technical Advice or Knowledge

Description of Factor:

A lack of technical advice or expert knowledge about how to build or maintain good quality, durable infrastructure

Summary of Results/Analysis:

- Access to advice had been an important factor in facilitating households to initially build their latrines.
- After ODF status had been achieved, many OD households felt that there was an absence of technical advice or knowledge that they could access.
- Whilst there was some follow up by Plan and local/government agencies, more information is required about to what extent these visits contributed technical advice.

Availability of Water

Description of Factor:

Lack of water or difficulty in accessing water making the construction, repair and cleaning of latrines difficult.

Summary of Results/Analysis:

- Since there were no pour-flush latrines in the study area, this barrier was not related to use of the latrines.
- Most comments about this factor were of a general nature about water scarcity; only a few related to water scarcity making it more difficult to repair or clean latrines.
- It is possible that this factor relates mostly to the use of water during construction but no strong indications were revealed about how water scarcity acted as a barrier to sustaining ODF status.

Quality of Initial Construction**Description of Factor:**

Poor quality construction of latrines initially acting as a barrier to the long-term maintenance and use of those latrines.

Summary of Results/Analysis:

- Water supply as an enabler relates to water for construction/repair, or water for cleaning and This factor was most commonly mentioned in Kenya and Ethiopia
- Four different types of quality issues were noted in the comments:
 - poor quality materials
 - the cost of building to a good standard initially
 - lack of knowledge about how to build to a good standard
 - pressure to build latrines quickly

IMPLICATIONS FOR PRACTICE

In October 2013 a final wrap-up workshop was held in Addis Ababa to bring together representatives from the four participating Plan country offices to consider the study findings and implications for CLTS programming. In line with the factor analysis described above, the conclusions and recommendations fell into two categories: (i) strengthening and supporting households and villages that have maintained their ODF status to both continue investing in latrines as well as improving them and enhancing improved hygiene behaviour; and (ii) addressing the issues that influence households to abandon their latrines. Six areas of focus emerged from this process.

Improving hand washing behaviour

Re-verification data showed that whilst Plan has been successful at getting households to build and retain latrines, it has been less successful at promoting hand washing and other improved hygiene behaviours associated with latrine use. For example, in at least 8% of households that still had a latrine, signs of OD were evident.

Three of the four most prevalent motivating factors given by ODF households for why they have retained their latrines (Shame/Disgust/Pride, Privacy/Security and Convenience/Comfort) relate to simply having a latrine but not necessarily hand washing facilities. In some locations cultural and religious reasons were given for why households did not have hand washing facilities at the latrines. In addition at the final workshop in Addis Ababa some Plan country program staff also identified that the standard CLTS approach emphasises a focus on only one key message – ending open defecation – rather than a range of health/hygiene messages.

Combined these all go some way to explaining why the study figures for hand washing were low. Further investigation is needed to understand the triggers for hand washing (and other improved hygiene behaviours). Whilst all country programs stated that hand washing

promotion is done alongside their CLTS programs, the quality and variability of these programs is unknown and would also be worth evaluating.

Health

In contrast to perceptions amongst implementers in the sector and other research² the study found that health was a significant influence on household behaviour. It was the most commonly cited motivator for initially building a latrine for both ODF and OD households and also for ODF households maintaining their latrines. The data collected for the study, however, did not test whether health awareness is a driver for sustaining ODF status or simply associated with ODF households; nor whether the health benefits reported by households are real or perceived.

A range of explanations are possible for the emphasis on health. Health promotion during CLTS programming, or in parallel with it, may have created an understanding that latrine use supports improved health. Alternatively, some households may have been persuaded through their own experience that latrine use improves health, whether this change is real or perceived. Further investigation is required to determine which responses are most relevant (such evaluation is currently underway elsewhere in the sector). The implications for practice from this study would depend on what that further investigation reveals. If households are influenced largely through education, then it suggests that health messaging in conjunction with CLTS promotion is important and that strong efforts in this area are worthwhile. Alternatively, if the influence is related to households' experience of better health from long-term latrine use, either real or perceived, then the focus should be on other factors that drive households to sustain their latrines. This will automatically strengthen households' perceptions or experiences of being healthier. It is likely that a balance between these two approaches may be needed depending on the context in which CLTS is being implemented, with the emphasis on health and non-health motivators varying over time.

Post-triggering and post-ODF support

Provision of support to households in the post-triggering/pre-ODF period, and then following ODF certification, was found to be a significant factor in the study. Households received support both from within their communities (discussed under community-level processes below) and from external agencies such as Plan or the local government. Support took the form of general encouragement and technical advice or assistance.

General Support: Plan and government agencies provide support to households between triggering and ODF declaration through monitoring of latrine construction and general encouragement to continue the momentum to become ODF. However, with the possible exception of some government health programs, no evidence of systematic post-ODF support was found. Hence it is postulated that in the absence of this support continuation of ODF status relies on strong community leadership. The factor analysis as well as the large numbers of households that were prompted to build latrines between the two phases of the study indicate that external support is significant. This is clearly an area that Plan and/or government

² Val Curtis, Keynote presentation, WASH Conference, Brisbane 2011

can influence through government health programs, regular re-verification, support to natural leaders or on-going monitoring by Plan or local government. Further research into the relative merits of these types of interventions is recommended.

Technical Support: The study found that better quality latrines were more likely to last and be maintained and that poor quality latrines were a significant factor influencing OD households' decisions to abandon their latrines. It was also found that ODF households accessed technical support to a higher degree than OD households. On this basis it is recommended that options for providing technical support be explored in order to ensure that all households have access to the advice and knowledge they need to build higher quality latrines. It is suggested that provision of technical support be provided at two strategic times:

- i. During latrine construction, prior to ODF certification.
- ii. Following rainy seasons or after sufficient time has elapsed that latrines are starting to deteriorate.

Whether technical support is provided directly by implementing agencies or Government or indirectly through targeted support to local masons is an area for further investigation. However, regardless of the mechanism, careful consideration needs to be given to ensuring that a heavy-handed engineering approach is not adopted, that would ultimately undermine the basic principles of CLTS, and that the advice provided is firmly grounded in local conditions.

Community-level processes

The study found that where there were higher levels of inter-household support, villages overall performed better in terms of maintaining ODF status. Based on comments by Plan staff and households, strong leadership – both formal and through natural leader networks – is also likely to be significant. Further investigation of the link between leadership and ODF status is recommended to identify potential areas for programmatic support.

In addition to internal leadership, two other community-level processes were found to be important. Firstly, attendance at triggering was found to correlate generally with ODF status and so efforts to encourage as many households, and as many people within households (particularly women), as possible to attend these events is recommended. Secondly, investigating the dynamics of what constitutes a 'cohesive community' is warranted. Such efforts are likely to inform implementing agencies and governments as to where best they are able to direct efforts to foster community cohesion.

Access to finance

The cost of sanitation is clearly of significance to households. Low-cost or free local materials motivated many households to build latrines. In many instances, however, this delivers poor quality latrines which require more maintenance. It was also notable that there was almost no evidence of households investing to upgrade latrines post-ODF – 98% of latrines were simple pit latrines suggesting that at best only 2% had been upgraded.

The findings indicate that in many instances it is not lack of funds that prevents this investment but prioritisation of other household expenditure over latrines. Sanitation marketing (discussed below) to encourage households to invest in commercial materials may improve household prioritisation of sanitation expenditure. Implementers could also be encouraged to learn about typical household discretionary expenditure in their program area to make it clearer during post-triggering follow-up what levels of investment in sanitation are realistic.

For some households, a lack of funds will be a genuine constraint on their ability to invest in more robust, durable latrines. For these households, micro-finance schemes or other credit initiatives may help to overcome financial barriers. Clearly this must not impact upon the central, non-subsidy tenet of the CLTS approach.

Areas for potential further research include investigating the relationship between household wealth and ODF sustainability, including whether greater wealth correlates with greater expenditure on latrine construction and subsequent maintenance or upgrading; and whether different members of the household are more or less likely to allocate funds towards sanitation.

Sanitation marketing

The study found that households almost universally built simple pit latrines using locally available materials. There was no evidence to suggest that households were moving up the sanitation ladder to any significant extent. This is a concern since better quality latrines with more durable materials were associated with households remaining ODF.

These findings highlight the advantages of complementing CLTS programming with sanitation marketing. Program staff noted that some small-scale sanitation marketing initiatives had been initiated, including training of masons and establishing village savings and loans schemes. The reach and intensity of these initiative appear to have been very limited and certainly the study findings indicate that these activities did not have any wide-spread impact on latrine quality.

The study has identified areas where demand for sanitation remains particularly strong several years after ODF certification. These areas would make good locations in which to trial a well-designed and resourced sanitation marketing program.

Areas for potential further research include piloting of sanitation marketing programs in study areas and newly certified ODF communities to determine at what point after triggering the introduction of sanitation marketing is most effective.

INTRODUCTION

This report details the results from a study of factors affecting the sustainability of open defecation free (ODF) status in rural villages following Community-Led Total Sanitation (CLTS) triggering. The study was initiated and sponsored by Plan International, and conducted by FH Designs, an Australian-based consulting firm. It investigated results in CLTS programs operated by Plan International in four countries in Africa—Ethiopia, Kenya, Uganda and Sierra Leone. Data was collected in 4960 households in 116 villages where CLTS had been triggered and communities declared ODF.

Plan International was an early adopter of the CLTS approach³ to sanitation and hygiene promotion and has been using CLTS in many countries in Africa and Asia since 2002. In 2011 a Plan Netherlands-commissioned review of CLTS reflection papers and evaluations across Asia and Africa⁴ concluded that there has been very little systematic investigation of sustainability of CLTS programs. The review noted in particular a lack of information about how well households sustain latrine facilities and improved hygiene behaviour patterns.

In 2012 Plan Australia engaged FH Designs to undertake a systematic study of the sustainability of CLTS in its Africa-based programs, with a focus on the factors which affect sustainability of ODF status after ODF has been declared in a community. The study, which was jointly supported by Plan Australia, Plan Netherlands and Plan UK, focused on three countries in East Africa (Ethiopia, Kenya and Uganda) and one in West Africa (Sierra Leone). These four countries were chosen primarily due to their early adoption of CLTS and the success of the Plan programs there in having achieved ODF communities two or more years before the study commenced.

The study sought to examine the extent to which CLTS generated long-term changes in sanitation and hygiene behaviour in target communities and to better understand what influences that behaviour change. Three research questions were identified in the study TOR:

1. What percentage of households are still ODF two or more years after ODF declaration?
2. What motivates households to remain ODF?
3. What are the primary causes of households reverting to OD?

The study report set out below is structured in four sections:

Background—summarises the literature on CLTS and ODF sustainability and which was drawn upon as a reference for developing the approach used in the study.

Study methodology—describes the processes used to refine the research questions and the two phases of data collection required to address them.

³ Kar, K & Chambers, R: 2008. Handbook on Community-Led Total Sanitation. Institute of Development Studies

⁴ Dianeetha Sadacharan for Plan Netherlands: Quick Scan of CLTS in Africa: Factors Influencing Sustainability, August 2011.

Results—based on analysis of the data collected, describes the principal findings in relation to each of the research questions.

Implications for practice—outlines how Plan International, and other agencies who are using CLTS to generate improvements in sanitation and hygiene, might use the findings from the research to improve the impact and sustainability of their CLTS programs.

The FH Designs team conducting the study was led by Paul Tyndale-Biscoe with support from Matthew Bond and Ross Kidd. Piloting of the data collection tools in Africa and training of the enumerator teams was led by Ross Kidd working with Deo Binamungu and John Odolon. Jose Mott provided technical guidance with respect to gender and social inclusion elements of the study.

The study also benefitted from insights and advice provided by three peer reviewers—Professor Robert Chambers, Institute of Development Studies; Associate Professor Juliet Willetts, Institute for Sustainable Futures, University of Technology, Sydney; and Andy Robinson, independent sanitation consultant. These peer reviewers provided valuable guidance for each stage of the study, particularly during inception and development of the research methods.

The study was commissioned by Plan Australia, and supported by Plan Netherlands and Plan UK. Funding was provided by DFAT (formerly AusAID) through the Australian NGO Support Program (ANCP) and the UK Department for International Development.

BACKGROUND

2.1 PLAN INTERNATIONAL AND CLTS

Plan was one of the first organisations to adopt the Community-Led Total Sanitation (CLTS) approach in Africa. Since 2007, Plan has trained and worked with community members, government and partner agency staff to trigger thousands of villages. Many of these villages have since achieved ODF status. Plan national offices, including Plan Netherlands (NLNO), Plan UK (UKNO) and Plan Australia (ANO) continue to support CLTS expansion across Eastern, Southern and West Africa, primarily through the Plan Pan African CLTS Program⁵. NLNO currently funds CLTS programs in Ethiopia, Kenya, Malawi, Uganda, Zambia, Sierra Leone, Niger and Ghana, while UKNO funds large programs in Kenya, Sierra Leone, Uganda and Zambia, including mixed approaches (CLTS/PHAST) in Togo and Burkina Faso. ANO funds projects in Ethiopia, Kenya, Uganda and Tanzania.

Many Plan countries also implement CLTS projects with sponsorships funds, and Plan is the executing agency for the Global Sanitation Fund in Cambodia and Malawi. Plan USA (USNO) recently commenced joint research pilots in partnership with the University of North Carolina Water Institute, Plan Kenya, Ethiopia and Ghana to test three ‘modified’ approaches to the standard CLTS model: in Ethiopia, working through schools and teachers; in Ghana, providing

⁵ For further details of Plan’s broader CLTS program in Africa, please refer to the Mid-term Review of the Plan Pan African CLTS Program which was finalised in March 2013.

extra training to natural leaders and in Kenya, building the capacity of district government staff.

Some Plan Country Offices (COs), typically those with older CLTS programs, have partnered with other sector agencies to successfully lobby government to incorporate CLTS into sanitation policy, and as a result are now increasingly playing more secondary, technical support roles, leaving leadership and planning to government ministries and trained frontline staff. Other country programs, though implemented in partnership with government duty bearers, still see Plan staff leading training, triggering, monitoring and field coordination.

The rapid expansion of CLTS across Plan International's program areas has produced a considerable amount of innovation and learning, including School-Led Total Sanitation (SLTS) in Ethiopia and urban CLTS in Kenya, identifying critical factors driving scale-up, and on a very limited scale, factors influencing the sustainability of open defecation free (ODF) communities. In 2008, Plan Bangladesh investigated ODF sustainability within its own CLTS program and discovered that a small proportion of households in ODF villages – mostly the poorest – had reverted to open defecation (OD), some within a year of ODF certification.⁶ However, very little if any research has systematically investigated ODF sustainability in Africa, including within Plan's CLTS programs. This was confirmed in a review of CLTS reflection papers and monitoring reports covering a range of Plan, WaterAid and UNICEF-supported programs across Africa and Asia.⁷ This exercise, while revealing a number of findings consistent with those identified during recent Institute of Development Studies (IDS)-supported learning and sharing workshops,⁸ highlighted the need for longer term assessments to better understand "...how and to what extent families sustain latrines and ODF practices..."

It was timely, then, for Plan to invest in what might be called a 'stock take' of ODF sustainability within its own programs, especially after nearly five years of CLTS implementation in its programs in Eastern, Western and Southern Africa. This kind of investigation is also important on account of the fact that some COs have now partnered with government ministries to scale-up the approach at district and even national levels. As such, knowing what has worked well so far, what has not and why offers significant potential for further learning and program improvement – not only for Plan, but also for other sector agencies, communities and government duty bearers who are ultimately responsible for owning and driving scale-up.

Table 1 below summaries the extent of Plan's CLTS work in each of the four study countries at the time of the data collection⁹.

⁶ Bhuiya, A.B. et al., *Impact of CLTS on Water and Sanitation and Diarrheal Morbidity in Selected Rural Areas of Bangladesh*, ICDDR-B, 2008.

⁷ Dianeetha Sadacharan for Plan Netherlands: *Quick Scan of CLTS in Africa: Factors Influencing Sustainability*, August 2011.

⁸ See *The Lusaka Declaration* (November 2010), *The Bamako CLTS Consensus: Dos and Don'ts* (December 2010), and most recently the Sharing and Learning Workshop at AfricSan 3, Kigali, Rwanda (19 July, 2011) – all available at www.communityledtotalsanitation.org.

⁹ These figures do not account for Plan's work in the four countries since mid-2012.

Table 1 – Summary of Plan's CLTS Work in the Study Countries at mid-2012

Ethiopia
• Triggering began Feb 2007
• First ODF community Sept 2007
• Since then 63 kebeles have been declared ODF (1829 DUs; pop approx 350k)
• By mid 2010 17 kebeles declared ODF (478 DUs; 20,985 HH; 107,049 pop)
• Average 25 – 30 HHs per kebele
Sierra Leone
• 1 st triggering 2008
• 799 villages triggered (pop approx 175k)
• 455 declared ODF
• By mid-2010, 160 triggered and 80 declared ODF
• Average 80 – 100 HH per village
Kenya
• 1 st triggering April 2007
• 584 villages triggered
• 240 have been verified
• By mid-2010, 100 had been triggered and 35 declared ODF
• Average 80-100 HH per village
Uganda
• 1 st triggering in 2007
• Since then 317 villages triggered
• 62 have been declared ODF
• By mid-2010, 33 had been triggered and 19 declared ODF
• Average 80 – 100 HH per village

2.2 LITERATURE

Prior to the development of the study methodology, a desk review of the relevant current literature relating to sustainability of CLTS was undertaken by FH Designs consultants. The aim of the review was to establish the extent of other similar research or evaluations of CLTS both in Africa and more broadly, in order to inform the design of the study and help define the scope and research questions. This section is a summary of the review and relevant results that pertain to the study. It should be noted that the review was carried out in February 2012, and so does not include publications that have become available since then.

The review found a plethora of reports, evaluations and discussion papers on CLTS in the literature, and compiled a list of 96 articles and documents that in some way related to CLTS and ODF sustainability. Of these, it concluded that only fourteen (five in Africa and nine in Asia) described studies that involved a systematic evaluation of some aspect of CLTS, with a structured and clearly described methodology. The review drew the distinction between CLTS *effectiveness*, which is defined as the process of taking a community from open defecation (OD) to ODF declaration, verification and certification, and *sustainability*, which is how well communities maintain their ODF status beyond verification and certification. Whilst making this distinction, the review also acknowledged that they are linked.

The fourteen studies examined focussed primarily on CLTS effectiveness, with less emphasis on sustainability, mainly due to the short time that had elapsed in most locations since ODF

verification. In Africa, only two studies considered sustainability in any systematic way: a WaterAid study of sustainability and equity of CLTS in Nigeria (conducted as part of a three country study, including Bangladesh and Nepal), and a study of the effectiveness and sustainability of CLTS and the health club approach in Zimbabwe.

Most of the studies operated with limited resources and were small in scale, collecting data in less than fifteen villages (see Annex B of the Desk Review for the actual figures). The exceptions to this were the two largest studies (one in Bangladesh and one in Indonesia) which had the backing of the World Bank Water and Sanitation Program (WSP) funding and so were able to cover a much larger number of villages. The Indonesia study, for example, collected data in 80 villages in 20 districts, and the Bangladesh study conducted research in 53 Union Parishads (parishes, below sub-district level) out of a universe of 481 Union Parishads declared ODF by June 2005.

Some of the methodologies and approaches that were common to most of the sustainability studies include:

- Comparing the sanitation facilities and behaviours of high and low performing villages, and in a few cases of median performing villages
- Using a mix of quantitative and qualitative methods
- Using a combination of participatory methods (e.g. community mapping, timelines, transect walks, welfare/wellness classification, focus group discussion), as well as household interviews, observation of household key informant interviews - and attempting to triangulate the results
- Collecting data from households at both ends of the continuum - those who were still practising open defecation and those who had broken away from open defecation
- Documenting the sanitation behaviour of different economic/income groups (poor, rich, and in-between households) and households classified as vulnerable or disadvantaged
- A clear and tight set of research questions.

In addition to identifying relevant sustainability studies, the review also summarised the main enabling factors and barriers to effectiveness and sustainability of CLTS that others have identified in the literature. Without attempting to assess the relative importance of any of these, the review sought to classify them in such a way as to guide the focus of this study. As well as classifying by enabling/barriers, the factor mapping structure sorted them according to effectiveness and sustainability (pre- and post ODF verification/certification) as well as by the level at which the factor comes to bear (community level, intervention level or enabling environment level)¹⁰.

The methodology that was developed for this study drew on those used in similar CLTS research as outlined above, and the factor mapping structure described above formed the basis of the factor based approach that was adopted, as described in the sections that follow.

¹⁰ Refer to the desk review for details of the factor mapping table.

STUDY METHODOLOGY

The research was conducted in two major stages—Phase 1 and Phase 2. Phase 1 involved visiting 4960 households in 116 communities in the four countries and through an observational check determining how many of these households retained their ODF status. Once preliminary analysis had been conducted on these results, a sub-sample of communities in each country was selected for the Phase 2, in-depth analysis of factors contributing to households either maintaining their ODF status or reverting to OD. The approaches to Phase 1 and 2 are described in detail below.

Before the study commenced, a participatory stakeholder workshop was held in Accra to clarify the research questions, refine the scope and carryout pre-planning for the involvement of Plan WASH teams in each country.¹¹ The workshop was facilitated by FH Designs and was attended by ten senior Plan WASH staff and two external peer reviewers for the study—Professor Robert Chambers (Institute for Development Studies) and Andy Robinson (independent sanitation consultant). The workshop affirmed the three research questions described in Section 1 above as being the core interest for the study and achieved three other important results. Firstly, participants generated a list of factors which potentially impact upon sustainability of ODF achievement, by drawing upon their extensive collective WASH experience. For each factor, stakeholders were identified who could advise about the sustainability impacts, along with potential data collection methods and pertinent questions. Secondly, the workshop generated plans for using the ‘Latrine Timeline’ tool (described in detail in Section 3.2.3) which was a significant innovation within the study. Finally, the two-phased approach to data collection was agreed upon involving re-verification on a large scale then in-depth analysis on a sample basis.

Following each stage of data collection, analysis of raw data was completed by FH Designs and then shared with Plan International stakeholders in each of the four study countries for their own analysis, comment and reflection. A final stakeholder Analysis and Reflection Workshop was held in Addis Ababa to examine the full study findings, discuss implications for CLTS practice and develop the recommendations which appear in Section 6.

3.1 PHASE 1 – RE-VERIFICATION

3.1.1 PURPOSE

Phase 1 of the study was designed explicitly to address the first research question—what percentage of households are still ODF two or more years after ODF declaration? Of the three research questions, this was the most straightforward to address and could be answered by assessing a large number of communities and households to inspect for the presence of latrines and hand washing facilities and signs of open defecation.

Since the study was interested in longer-term sustainability, it was necessary to identify communities that had been declared ODF for some time. By agreement amongst stakeholders, a period of two years before the study data collection (May-June 2012) was set as the

¹¹ FH Designs, 2012, Plan International ODF Sustainability Study Inception Workshop Report

minimum period for inclusion in the study. Within CLTS programs, ODF status is recognised at several different stages which occur sequentially, namely declaration, verification and then certification. Communities generally 'declare' themselves to be ODF once community members themselves (or their CLTS committee) believe that open defecation has been eliminated. Verification occurs when an independent, external review team visits the community and confirms that ODF has in fact been achieved. Within some programs, a final stage of certification occurs when the government formally recognises a community's ODF achievement. This step is often combined with an ODF celebration. Whilst these three steps can happen in quick succession, a significant period of time often elapses between a community being verified as ODF and subsequently receiving the formal recognition from the government of their ODF status. For the purposes of this study, the minimum two year period was taken from the time of verification, not certification.

The study assumes that verification was undertaken rigorously in all communities and hence that at the time of verification all households in the study communities had achieved the ODF criteria agreed for their country or district. Whilst discussions with Plan staff affirmed that this was an appropriate assumption on which to base the study, it is plausible that attainment of ODF status was less than perfect. Hence the study's assessment of 'slippage' back to OD is more likely to be an over- rather than under-estimate.

3.1.2 SAMPLING

Plan WASH program staff in each country were asked to identify approximately 20 communities that had been verified as ODF two or more years ago (in 2010 or earlier). The number of communities identified for Phase 1 in each country is set out in Table 2. It may be noted that in Ethiopia, significantly more than 20 communities were selected. This was intended to compensate for the communities there having small populations relative to other countries. In effect, household numbers in Ethiopia and also Uganda were much larger than in Sierra Leone or Kenya. The date range (from earliest to most recent) during which CLTS 'triggering' took place and communities were verified to be ODF are also noted in the table.

Table 2 Communities selected for re-verification in Phase 1

Country	Program Unit ¹²	Villages	Households	Triggering (range)	Date certified (range)
Ethiopia	Jimma	25	802	March 2007	April 2008
	Shebedino	32	975	Feb/Mar 2007	Aug/Sept 2007
Kenya	Homabay	10	442	May 2007 – July 2009	Feb – June 2010
	Kilifi	10	392	Apr 2006 – May 2008	Aug 2008 – Nov 2009
Sierra Leone	Port Loko	10	208	Feb 2008 – Dec 2010	Mar 2009 – Nov 2011
	Moyamba	10	294	Oct 2008 – Feb 2010	Feb 2009 – May 2010
Uganda	Tororo	19	1860	Jan – Oct 2010	Oct 2010-Oct 2011
Total		116	4960		

In fact a number of communities – particularly in Uganda – did not meet the two year criteria as there were simply not enough villages that had been triggered that qualified. Plan was keen for these countries to participate in the study and so the decision was taken to relax this

¹² Plan structures its work in 'Program Units' (or PUs) within each country, these being generally aligned to geographical boundaries (districts or sub-districts) and with generally several PUs operating in each country.

criteria where necessary to ensure the numbers of villages was balanced across the four countries.

3.1.3 RE-VERIFICATION CRITERIA

All the communities incorporated in the study had been declared ODF by verification teams involving government, community and (in some cases) Plan staff. This implies that at the time of declaration no one in these communities was practising open defecation and that all households had their own latrine (or were using a neighbour's latrine) at that time. Whilst ODF status is certified on a community rather than household level, the criteria for certification require inspection of household facilities. Criteria for ODF certification varied slightly across the four study countries but a common set of requirements for household-level ODF status was apparent. These required each household to have:

- Absence of excreta in the vicinity of the house
- A latrine with a superstructure; with a means of keeping flies from the pit (either water seal or lid)
- Hand washing facilities with water and soap or soap-substitute such as ash
- Evidence that the latrine and hand washing facilities were being used (e.g. a well-trodden path)

It should be noted that in the literature, re-verification of a community's ODF status is promoted as a potential motivator for encouraging communities to remain ODF.¹³ None of the communities that were included in the study had been re-verified and hence this factor would not have influenced ODF sustainability observed during the first phase of the study.

3.1.4 DATA COLLECTION

Prior to Phase 1 commencing, senior Plan WASH staff in each country were appointed as focal points for the study. These staff assembled, trained and supervised small teams of enumerators who visited all of the 4960 households in the study sample to assess these four criteria. Enumerators were tasked with collecting data on a small number of additional variables concerning demographic and physical conditions of the household and sanitation facilities. These included the sex of the household head; the number of members in the household; and physical features of the latrine including type, construction materials, and cleanliness.

Survey formats were designed in such a way that they could be completed by combining interview responses from a household representative with observations on the part of the enumerators. In this way, it was possible to assess household in a reasonable period of time without having to schedule interviews for every household. Enumerators were also equipped with GPS devices to determine the spatial location of each household. This data was required for Phase 2, as described below. In addition to household information, lead enumerators also collected village-level data during the re-verification process. This included information on

¹³ Lukenya Notes, 2011. Taking Community Led Total Sanitation to Scale with Quality. Outputs from a workshop in Nairobi, July 2011.

village demographics, latrines in schools and clinics, public latrines and local soil conditions (of particular significance when building simple pit latrines). Village and household re-verification survey record sheets are attached in Annex A.

FH Designs provided the survey formats and data entry templates required for the re-verification process. Plan International staff in each country managed the data entry process (although in some cases they engaged external staff for data entry). Data was then submitted to FH Designs for review, cleaning and consolidation.

3.2 PHASE 2 – FACTORS AFFECTING ODF STATUS

3.2.1 PURPOSE AND APPROACH

Phase 2 of the study was designed to respond to research Questions 2 and 3—determining what were the causes for households either remaining ODF or abandoning their latrines and reverting to OD. It required a purposeful sampling of ODF and OD households from amongst the re-verified communities and then in-depth analysis on the part of household members and village leaders as to what had led them to act as they do.

During Phase 2 households and community leaders were consulted about what factors were most significant in driving their behaviour. Findings from these consultations (described below) are the principal source of data described in the Results section. This approach is founded on the premise that householders and community leaders inherently have an understanding of what has influenced their behaviour and if asked in an open, engaging setting can articulate and analyse these motivations.

The study Inception Workshop in Accra identified a broad range of ‘factors’ which the workshop participants thought might influence household behaviour regarding building, repairing, replacing or abandoning their latrines or hand washing facilities. Exploring these factors was the central task of Phase 2. The study team divided the factors into two broad categories—motivating factors and facilitating factors (Table 3). Motivating factors were those that operated on a psychological level to influence behaviour such as perceptions of dignity, convenience and improved health. Facilitating factors were those that made it easier or harder to build and maintain sanitation facilities such as availability of labour or materials, soil type, subsidies and technical knowledge.

At both the community leader and household level, responses were sought from women and men separately so that gendered dimensions of motivation could be identified. Some of the factors are not relevant to household motivation (e.g. village demographics and community governance) were excluded from the list of factors relevant to households. A full list of factors was considered by community leaders.

Table 3 - Motivating and facilitating factors

Motivating Factors (positive)	
M1	Accessibility for all household members
M2	Wanting to be like others
M3	Convenience, Comfort
M4	Privacy, Security

M5	Cultural, religious, moral beliefs
M6	Shame, Disgust, Pride
M7	Health
M8	Improving things for the family
M9	Force (by-laws, penalties, threats)
M10	Rewards, incentives
M11	Follow-up visits, advice, external support
M12	Sanitation or hygiene promotion campaigns
De-Motivating Factors (negative)	
DM1	Inconvenience, Discomfort
DM2	Location too far or hard to reach
DM3	Fear of harm - slab collapsing, falling in
DM4	Regular cleaning too much effort
DM5	Maintenance, Repairs
DM6	Financial Constraints
DM7	Shared with others
DM8	Cultural, religious, moral beliefs
DM9	No more support
DM10	Peer pressure
Enabling factors (positive)	
F1	Local soil and ground conditions
F2	Availability of land, materials, labour
F3	Availability of water
F4	Quality of initial construction
F5	Technical advice or knowledge
F6	Subsidies
F7	Affordability, cost
F8	Support from others in the community
Barriers (negative)	
DF1	Local soil and ground conditions
DF2	Availability of land, materials, labour
DF3	Availability of water
DF4	Quality of initial construction
DF5	Technical advice or knowledge

Several of the factors could operate in either a positive or negative sense. For example, technical advice, when available, made it easier to construct durable latrines whereas a lack of advice made it more difficult. Similarly, depending on how household members perceived the experience, using a latrine could be either more or less convenient than OD. Consideration was given to using 'neutral' factors that could be expressed either positively or negatively. To avoid confusion during the data collection process, however, negative and positive outcomes for individual factors were listed and recorded separately.

The initial list of factors developed in Accra comprised 193 different concepts with the potential to influence household or individual behaviour. This number was too unwieldy to manage during household and community consultations and hence the factors were consolidated into the list shown in Table 3 above and then further divided into the four sub-categories of either motivating/facilitating and positive/negative so that enumerators had no more than 12 factors to select from when categorising responses. Comments recorded during

the consultations (described below) enabled a nuanced understanding of different ideas or emphases for individual factors (e.g. was labour or land a more significant within Factor F2).

3.2.2 VILLAGE AND HOUSEHOLD SAMPLING

Data collection in each village took place at two levels: village and household. The selection process for households and communities is set out below followed by a summary of the data collection methods used at each level.

The study approach hypothesised that within the sets of villages sampled in each country for Phase 1 a mix of outcomes would be found, ranging from communities that had mostly abandoned their latrines (classified as OD communities) to those that had mostly maintained them (classified as ODF communities), with some communities falling between the two. The Phase 2 processes were designed to investigate behaviours in these different contexts: predominantly OD, a mix of OD and ODF, and predominantly ODF. The re-verification process, however, found much lower levels of slippage (see box) back to OD had occurred than was anticipated (as described in Section 4.2). Consequently, whilst three types of villages were still identified the classifications were:

Slippage

Slippage is the term used to describe, at the household level, the act of abandoning the latrine and reverting to open defecation. For the purposes of selecting households and villages for Phase 2, households were classified as OD or ODF based solely on the basis of whether they had a functioning latrine. Slippage in this context therefore is the decision point at which a household decides to abandon its latrine.

- **Practicing ODF** (in which the majority of households still use and maintain a latrine);
- **Medium ODF** (in which some households have returned to OD); and
- **Weak ODF** (where the highest proportion of households—up to 50%—have returned to OD).

Data from Phase 1 was used to identify villages into each of these three categories. From the 116 villages sampled for Phase 1, ten villages in each PU were selected for Phase 2 (except in Kenya where 12 villages were selected, six from each of the two PUs, and in Sierra Leone, where 10 in total were selected). Selection was purposive. Communities in each PU were ranked by the percentage of ODF households. Ten villages were then selected by taking the three strongest ODF communities, the three weakest and the four median communities. Phase 1 communities with fewer than 12 households were excluded from selection. The resulting communities selected for Phase 2 are set out in Table 4.

This general principle was adapted as required to account for variations in each particular country and PU contexts. In Kenya, budgetary constraints allowed for only six communities being selected for each PU in Phase 2, and in Sierra Leone there was a limited pool of villages from which to draw. In some cases, villages were highly OD or ODF but had relatively few households and so were replaced by larger villages with greater numbers of OD or ODF households. Some PUs, notably Homabay, showed relatively little variation in slippage across communities. Where Phase 1 results were similar, choices were made to select communities from different geographic locations within the PU.

Table 4 - Phase 2 village selection by country and PU

Country	PU	Village Name	Village Type	#HHs	%age slippage	#Female headed HHs
Ethiopia	Jimma	Odoro	Weak ODF	95	41%	16
		Agelo	Weak ODF	22	36%	4
		Deru	Weak ODF	29	31%	3
		Jewaro	Medium ODF	27	19%	0
		Mensuri	Medium ODF	29	17%	0
		Egu	Medium ODF	31	13%	2
		Besase	Medium ODF	32	13%	5
		Gomoto	Practicing ODF	35	0%	6
		Digo	Practicing ODF	29	0%	1
		Loga	Practicing ODF	30	0%	1
	Shebedino	Mamota	Weak ODF	31	32%	4
		Huwo	Weak ODF	29	31%	1
		Chamamo	Weak ODF	26	31%	0
		Bunguda	Medium ODF	32	25%	2
		Beguda	Medium ODF	33	18%	2
		Burketo	Medium ODF	40	15%	3
		Kentra	Practicing ODF	58	7%	4
		Boro	Practicing ODF	36	0%	9
		Shelonkato No.1	Practicing ODF	32	0%	3
		Chafe	Practicing ODF	43	0%	7
Kenya	Homabay	Ndori	Medium ODF	138	28%	49
		Rambusi	Medium ODF	34	26%	11
		Oria	Medium ODF	31	26%	8
		Kamsure	Medium ODF	34	24%	14
		Wagogo	Medium ODF	49	22%	19
		Manera	Medium ODF	33	18%	9
	Kilifi	Jaribuni	Weak ODF	51	57%	16
		Katsemerini	Weak ODF	38	47%	10
		Umoja Ni Nguvu	Medium ODF	36	14%	8
		Misufini	Medium ODF	44	9%	8
		Ngamani Bale	Practicing ODF	48	6%	19
Sierra Leone	Port Loko	Dzimanye	Practicing ODF	35	6%	13
		Rogbai	Weak ODF	21	33%	3
		Gbaneh	Weak ODF	30	30%	4
		Futha	Practicing ODF	31	6%	6
	Moyamba	Makabu	Practicing ODF	23	4%	3
		Gbanguma	Weak ODF	35	37%	10
		Taba	Weak ODF	72	35%	10
		Mokellay	Medium ODF	29	21%	12
		Solima	Medium ODF	30	20%	6
		Manjendu	Medium ODF	48	17%	11
		Taninihun	Medium ODF	24	17%	4

Uganda	Tororo	Atiri D	Weak ODF	119	23%	18
		Aputir Central	Weak ODF	123	21%	32
		Aputir West	Medium ODF	75	19%	17
		Atiri C	Medium ODF	131	14%	17
		Kajarau South	Medium ODF	112	13%	29
		Kajarau North	Medium ODF	85	11%	14
		Kajarau North East	Medium ODF	70	9%	13
		Atiri B	Practicing ODF	132	8%	19
		Akworot A	Practicing ODF	105	5%	25
		Akworot B	Practicing ODF	109	4%	23

Selection of households for inclusion in Phase 2 used a two-stage cluster sampling process. For each of the villages chosen for Phase 2, Phase 1 re-verification data was then used to select 24 households for consultation using randomised selection within geographical clusters. This number of households was determined through a pilot of the data collection, being the maximum number feasible within a three day village consultation process.

In Practicing ODF communities, only ODF households were chosen. Likewise, in Weak ODF communities only OD households were selected. For Medium ODF communities, a mix of approximately equal numbers of OD and ODF households was chosen (using the same selection process twice for each group).

Spatial clusters in each village were identified using GPS data. Each household was ranked according to its distance from all the other households in the village and then every 'X/24th' household (where X was the number of households in the village) was chosen for inclusion in Phase 2. This process ensured that all areas of a village were included. Because of the lower-than-expected number of OD households identified in Phase 1, in most of the Medium ODF villages and several of the Weak ODF villages, it was necessary to select all OD households rather than use the random approach described above.

Phase 1 data was used to crosscheck the households sampled in each village to ensure that they included a representative sample of female-headed households. Where this did not occur some were manually added using a random selection process to bring the total up to the same proportion as in the whole village. Female-headed households were deliberately included to allow for the analysis to be able to check whether particular factors were gendered.

3.2.3 PROCESSES

Phase 2 data collection used two complementary and highly participatory consultation processes, one at village level and one at the household level.

VILLAGE-LEVEL CONSULTATIONS

Whole-of-village meeting

Village consultations commenced with a whole-of-village meeting during which the enumerator team introduced themselves and the purpose of the study to the community.

Sampled households had been identified prior to arrival and the village meeting was used by enumerators to meet with representatives of those households and schedule interviews for the subsequent days. Two groups of community leaders—one of women and one of men—were self-selected during the meeting and invited to participate in the village-level analysis. These groups were drawn from traditional leaders, teachers, health extension workers, religious leaders and those who played leadership roles during CLTS campaigns, such as sanitation committee members and CLTS Natural Leaders. Enumerators aimed for each group to have 6 to 10 leaders. Female enumerators worked with the women’s group and male enumerators with the men’s group.

Village ODF timeline

Working in their sex disaggregated groups, participants were asked to create an ODF ‘timeline’ for the village, from the commencement of CLTS promotion activities to the present. Participants then marked on the timeline any events they thought were significant in relation to sanitation or hygiene behaviours for the community. As a minimum, this was expected to include: triggering, ODF achievement, ODF verification and ODF certification. Other events that participants were invited to consider included: ODF celebration, monitoring visits by government, Plan or others, changes in water supply access and natural disasters.

Factor analysis

Once the timeline had been prepared, each group was facilitated to discuss the factors that were most significant in initially motivating households in their community to build latrines. Timelines were used as a tool to spark discussion. Groups were asked to brainstorm themselves what three or four factors they thought were most significant in motivating households initially to build latrines. They then used markers to weight the relative importance of these three or four most important factors and the results were recorded by the enumerators.



Male Community Leaders Prioritizing Factors, Shebedino, Ethiopia

This process was then repeated by each group with the focus being on what was currently motivating households to maintain or abandon their ODF practices (rather than what had motivated them initially). For communities that were predominantly ODF discussion focused on factors related to remaining ODF; for communities that had mostly reverted to OD, discussion focused on factors related to reversion. The factor list described above (Table 3) was used by facilitators to prompt discussion. Once groups had assessed all factor categories, facilitators helped them isolate the most important factors which were then ranked and weighted. For 'mixed' communities, this process was carried out twice, once for factors leading to remaining ODF and once for factors for reverting to OD.

Timeline and analysis sharing

Once the groups of women and men had concluded their analysis, a plenary session was convened so that they could share their timelines and analysis. Facilitators highlighted variation in the timelines and sought clarification and agreement. Prior to completing the consultation, facilitators asked the participants a number of survey questions to collect village-level factual data (as distinct from perceptions explored through the factor analysis). This included information about the village water sources, sanitation subsidies, by-laws and regulations, role of the sanitation committee, whether new households had been established since ODF verification and whether they had built latrines, and the types of follow up provided for sanitation and hygiene behaviour change. Full details of the survey questions are provided in the Village Leader Consultation Record Sheet (Annex B).

HOUSEHOLD-LEVEL CONSULTATION

The most important element of Phase 2 was the household-level consultations. These were conducted along the lines of a 'focus group discussion' with groups of household members (both women and men) from individual households. As with the village-level consultations, the aim of this was to identify the most significant factors for either maintaining a functioning latrine for their household (ODF households) or abandoning it at some point following ODF certification (OD households). It should be noted that the process operated on a collective (i.e. household) level and in doing so consolidated the views of various individuals represented at the consultation. Whilst the views of women and men were recorded separately, there was no attempt to drill down to individual behaviours within households. New households that had been established since ODF certification were excluded from the sample. The presence of such households, however, was noted during the village-level process since this may have had a bearing on whether a village remained ODF or not.

The household level consultations involved three processes:

- household sanitation timeline
- household factor analysis
- household survey and observation

The enumerator guide for the household consultations and the associated record sheets are attached as Annex D.

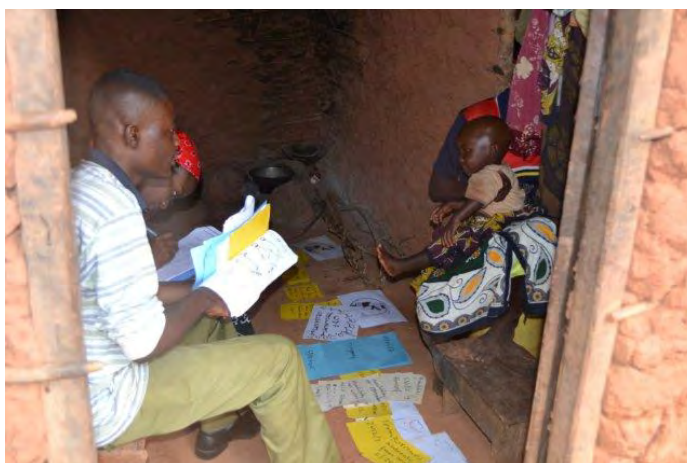
Sanitation timeline

As with the village consultations, household participants were asked to create an ODF ‘timeline’ for their household starting from the commencement of CLTS promotion activities to the present. Participants then marked on the timeline any events they thought were significant in relation to sanitation or hygiene behaviours for the community. For households this included activities that were relevant to the household—e.g. pit became full, rebuilt latrine; household member X started/stopped using the latrine. Timelines were drawn on the ground, and symbols on cards used to illustrate significant events. Before events were added, facilitators were asked to help mark out time intervals on the timeline using something easily understood in the context (e.g. rainy season, new year, planting time, etc.). Timelines were transcribed to proforma record sheets by enumerators, showing the date and description of each event.¹⁴

Factor analysis

As with the village-level consultations, the households were facilitated to use the sanitation timeline to prompt discussion about the factors that led to building and then sustaining or abandoning their latrine. As events or influences were added (e.g. ‘pit filled up and latrine was rebuilt’) these were added to the timeline. For all households discussion and analysis commenced with the initial aspects and motivators for building their latrines. A summary of each factor identified by a household was recorded by the enumerators.

Discussion then moved to what had occurred since ODF declaration. For ODF households, this focused on what had motivated households to use and maintain their latrine and, where relevant, to rebuild or improve it. Enumerators recorded these



Discussing Factors, Kilifi, Kenya

factors on index cards (either pictorially or in text depending on literacy levels within the household) using as a guide the pre-prepared list of factors developed for the study. Once all the motivators had been identified, households were asked to think about factors that had facilitated them building or maintaining their latrines, or barriers and challenges that they had faced. This process was designed to identify as many factors as possible that were relevant to household experiences. Whilst the pre-prepared factor list was used as a guide, there was provision for enumerators to record additional factors that were not part of the original list. In practice, however, no new factors were identified. In the village-level consultations participants were invited to consider each of the factors on the pre-defined list and decide whether it was relevant to their situation. This was

¹⁴ There was the intention to photograph all the timelines, however, for unknown reasons this did not happen.

not done for the households and only those factors raised by households in response to their timelines was recorded by enumerators.

A final step in the consultation process was used to learn about which factors raised by a household had most influence on their behaviour. Household members, working in separate groups of women and men, ranked their top five motivating or influencing factors by arranging the index cards produced during the discussion with the enumerator. These were then transcribed by the enumerators onto the record sheet.

For OD households, an identical process was followed except that the discussions centred on what had caused households to abandon their latrines. The ranking exercise was used to prioritise the de-motivating factors and barriers to sustaining a latrine.

Household survey and observation questions

To supplement information derived through direct consultations a short questionnaire survey was carried out along with direct observation by enumerators of latrine and hand washing facilities (refer to Annex B). The survey data collected included number, age and sex of the household members; level of education; attendance at the CLTS trigger event; defecation practices away from the household; management of child faeces; hand washing knowledge and facilities; difficulties with accessing the latrine; water supply; initial construction costs; local soil conditions; awareness of by-laws; and experience of maintenance problems. Direct observations were made to assess the type and condition of latrines and hand washing facilities and to check for evidence of use.

This additional information collected through the questionnaires and observations was used to investigate and triangulate self-reported motivations and to directly correlate sanitation status (OD/ODF) with a number of factors. The priority factors raised by households and communities themselves led the analysis of the results and guided the way in which the questionnaire/ observation data was analysed.

DATA COLLECTION

Piloting

Following comments from peer reviewers and Plan stakeholders, draft processes for the village and household consultations were pilot tested by a small FH Designs team in Tororo District, Uganda.¹⁵

The pilot test was run in Tororo District, the first district introduced to the CLTS approach by Plan in Uganda. The six day process consisted of planning sessions, briefing sessions with the local research assistants, and three days of village based field testing of the research methods. Planning and organisational support was provided by Plan Uganda. Two local Village Health Team volunteers were engaged to help deliver and critique the tools. The village-level consultation process was trialled in three different communities and household consultations

¹⁵ A detailed report on the pilot is available as a separate document—FH Designs, 'Plan International ODF sustainability study – phase ii - pilot test of the research methods & process, Tororo District, Uganda, 1st – 6th July 2012'.

were carried out with three households, including one female-headed household. None of the villages involved in the pilot were included in the Phase 2 sample.

As a result of the pilot testing a number of important changes were made to the draft tools, particularly:

- The original factor list was found to be too long and unwieldy for enumerators to manage during consultations. It was subsequently condensed and the four classifications of motivator/facilitators were added.
- Identifying and coding the factors at the time of the interview was difficult and it was agreed that only a narrative summary of the comments should be documented during the consultation and the coding be applied by enumerators later.
- The original processes included both ranking and weighting, both for initial factors and for the current state (OD/ODF). This made the consultations too long and so was simplified to just ranking those factors associated with the current state. A target duration of household consultations was set at 90 minutes.
- A community mapping process during the initial village meeting was deleted.

Enumerator selection and training

Teams of enumerators in each country were identified and contracted by Plan International. Roughly equal numbers of women and men (Table 5) were engaged as enumerators. Training for enumerators was carried out by a team of three FH Designs consultants—Ross Kidd, John Odolon and Deo Binamunga. Training consisted of a five day program with



Enumerator Training, Kilifi, Kenya

three days of workshop discussion and two days of supervised field practice. The workshop covered: an introduction to CLTS; an introduction to the research purpose; facilitation techniques; understanding of the study factor list and categories; sanitation and hygiene observations; household and village interviewing processes. Field practice included interviewing with both community leaders and households; and practice completing the record sheets. During the field practice the FH Design trainers provided feedback to the enumerators on their interviewing skills and on use of the record sheets. The first round of training was held in Ethiopia and involved all three FH Designs trainers to ensure that all enumerators would receive the same advice and instruction. The trainers then delivered the training program separately in the other three locations—Sierra Leone (Ross), Kenya (Deo) and Uganda (John). None of the communities where training was carried out were included in the formal data collection for Phase 2.

Table 5 Enumerator training details

Country	Enumerators	Dates
Ethiopia	13 Men, 4 Women	27 - 31 August 2012
Kenya	10 Men, 7 Women	3 - 7 September 2012
Sierra Leone	9 Men, 6 Women	4 – 8 September 2012
Uganda	5 Men, 4 Women	11 – 15 September 2012

Field work and data entry

Data collection in each of the villages detailed in Table 4 was carried out by the enumerator teams between September and October 2012. The FH Designs training team worked with the enumerators during their first week of data gathering to mentor and support the enumerators.

Enumerator teams spent an average of three days per community which allowed sufficient time to carry out both the village-level consultation and 24 household consultations. Enumerators were equipped with GPS devices to locate (in conjunction with other information such as the first name of the household head) the households that had been selected for Phase 2 from amongst all households re-verified in Phase 1. Lead enumerators were responsible for overseeing their team and managing interaction with village leaders. Enumerators were also provided with voice recorders to record the consultations for their own reference when documenting the results and were asked to photograph timelines and ranked factor lists. In practice, little if any use was made of the voice recorders and no photographs were collated to accompany the written consultation records.

Enumerators worked in pairs during consultations with households and were responsible for documenting the results of each consultation on a standard 'Household Interview Record' form. Data from these forms were then entered into a customised MS Excel spreadsheet with data validation rules for all fields to minimise data entry errors. Plan's focal point for the study in each country arranged their own data entry clerks. Some were drawn from the team of enumerators and in other cases (for example in Ethiopia) additional people were engaged solely for the data entry task.

Completed MS Excel data files were sent to FH Designs for error checking and data cleaning. Results were analysed using a combination of MS Excel, MS Access and PASW statistics software.

3.3 LIMITATIONS

The study involved a large sample across a range of different context underpinning the validity of results. The limitations set out below were considered when interpreting the results presented in Section 4.

Household rather than individual motivations. The study method focused on influences and behaviours at the household level. This was appropriate given that latrines and hand washing facilities are household assets and that household-level decisions determine whether or not they are maintained. Nonetheless, sanitation and hygiene behaviour also has a personal dimension and different behaviours and motivations are likely to exist within a single household (to the point that some members may continue with OD). The study method did not disaggregate results at the level of individuals and this may mask motivators for those household members who are not in a position to strongly influence decision making. Further investigation would be required to explore what factors most strongly influence less-powerful members within families.

Community-specific factors. The community sample size (approximately 10 communities per PU, 52 in total) will weaken statistical analysis of community-level factors. For example, the elapsed time between ODF being achieved and being certified may correlate with household behaviour but the community sample size is likely to be too small detect that correlation.

New households, established after ODF certification took place. Whilst it is of significant interest to practitioners, the extent to which newly established households build and use latrines and hand washing facilities was not assessed in Phase 2. Since the main research questions relate to what motivated households after they became ODF, it was not appropriate to include newly established households in the Phase 2 consultations. Nonetheless, some information on this issue was gained through the survey responses of village leaders who were asked about the number of newly established households and how many of those have built latrines.

Investigating and reporting on perceptions. The data collection approach relied predominantly on participant self-analysis and reporting of what has motivated their behaviour. Whilst the simplicity and power of this approach made it appropriate, there was a risk that the factors perceived as being significant by respondents have masked other factors. For example, in some instances, households reported that they could not afford to rebuild their latrine when it needed repair. This may or may not be true, depending on whether funds were prioritised for other purposes. It should also be noted that perceptions in themselves are significant and need to be understood if the end aim is to influence behaviour. During analysis of the data, observational and survey responses were used to explore correlations with perceptions. In some cases this flagged the potential for follow-up research for highly-rated factors.

Additionally, whilst the methodology was designed to reduce the likelihood of enumerators 'leading' household members in their responses (e.g. the guiding questions were not meant to be asked until a particular factor had been clearly identified through an unstructured discussion), it is not clear how well the enumerators actually applied it. Whilst the analysis has been done on the assumption that the factors emerged naturally from the discussions, it would be good if this process could be validated.

Process affecting the outcome: There were cases where significant changes occurred between Phase 1 and Phase 2 in the number of OD or ODF households in some communities. For example, in Sierra Leone Taba community every household selected as OD for Phase 2 had become ODF between the two phases. Several other villages had similar albeit slightly less dramatic increases in ODF coverage. In other cases the number of OD households increased. This factor was quite significant overall, occurring in 174 of the 1212 households sampled for Phase 2. There are several potential explanations for this phenomenon including 'genuine' change that occurred independently of the study and enumerators failing to locate the sampled house from Phase 1 and mistakenly interviewing a neighbouring household. Analysis of the Phase 2 data set for key parameters with and without these households suggested that these households did not influence the study results.

Quality of transcription and coding. Extensive efforts were made with respect to training and supervision of enumerators and with data validation requirements in data entry templates to

minimise ambiguity and error in the study data set. Nevertheless, several problems were identified during initial submission of data from each of the four countries and required extensive re-entry in several of the PUs. The quality of information from the sanitation timelines and the ranking of factors proved particularly problematic and could not be used to the full extent envisaged in the design of the study methods. Compounding this issue, audio files from the voice recordings and photographs of the timelines and factor ranking were not provided to the data analysis team.

Observation versus Interviews in the Re-verification Process. Whilst the data collected during the re-verification exercise was largely observational, there was still a reliance on household members for some of the data (e.g. latrine use). In 12% of households, however, there were no household members present and so the enumerators based their recorded data on observed signs of use only. How effectively they did this is not known and so this uncertainty will add a likely error to this aspect of the data set.

RESULTS

This section presents the results of both Phases of the data collection, as well as some interpretation of what the results show. As well as an overview of the data sets from both phases, the results are presented in line with the three research questions outlined at the beginning of this report, and so is structured as follows:

Data Sets	A description of the Phase 1 and Phase 2 data sets.
Slippage	Research Question: What percentage of households are still ODF? A presentation of the data outlining the slippage levels by village at re-verification.
Reasons for households to remain ODF	Research Question: What motivates households to remain ODF? A presentation of the primary factors given by households that still have a functioning latrine as to what has motivated them to repair, rebuild and/or maintain their latrine since ODF certification
Reasons for households to revert to OD	Research Question: What are the primary causes of households reverting to OD? A presentation of the main reasons given by households for originally building a latrine, and their subsequent reasons for abandoning them and reverting to open defecation.

The focus of the analysis is on the factors given by householders themselves, which are disaggregated by ODF status, Plan Program Unit and village type. Those factors that are most commonly cited then provide a further focus for the analysis which has drawn upon both the (household level) qualitative data collected as well possible correlations between physical, demographic, cultural and other data collected during both phases of the study, and ODF status.

4.1 DESCRIPTION OF THE DATA SETS

The following sections give a brief overview of the two sets of data that have been used to address the three research questions. The data sets are quite extensive and include a broad range of both quantitative and qualitative information.

Whilst this report describes two data sets, in keeping with the two data collection phases, in fact all the data is contained in a single relational database using MS Access. Figure 1 below presents the overall structure, illustrating the connection between the two subsets (phases).

The relational database structure allowed the full dataset to be interrogated when required. The actual analysis was then done using other software such as MS Excel, MS Access and PASW statistics software.

4.1.1 PHASE 1 - RE-VERIFICATION DATA

As described in Section 3.1, a total of 4960 households in 116 villages were re-verified across the four countries (see Table 2). Whilst it was intended to have roughly equal numbers of villages and households in each country, ultimately the selection of the villages was left to the Plan country teams and this resulted in some variation between countries. In Ethiopia, Sierra Leone and Kenya the process was replicated in two PUs, which presented some resourcing and

logistical challenges, but resulted in a broader data set. The other constraint placed upon the data set was the number of available villages in each country that met the fundamental criteria of ODF certification having been completed two or more years prior to the study – for example in Uganda, some of the village selected barely met this criteria. Kenya and Sierra Leone both reduced the number of villages in their samples due to resource limitations and in Ethiopia the number of villages included in the study was increased as the average size of the villages was small compared to the other countries. The varied sample sizes in each country are shown in Table 2.

The primary data collected during this phase was observed, quantitative data about household latrines. The data was collected over a relatively short period of time, and no prior warning was given to households that the process was going to take place. As a result, in 12% of households there was no household member present at the time of the visit. This was anticipated in the process, and enumerators were instructed, when confronted with an empty house, to seek out the latrine and, if found, record the relevant data. Where possible, demographic and other household-level data in these instances was gained from neighbours or the village head. The enumerators were prompted to note down any comments or observations about the general state of cleanliness of the latrine or the household, but this was not done systematically enough to be useful.

Some village-level data was also collected during the re-verification exercise, mainly focused on the presence of schools, clinics and public latrines – again mostly observational data that was considered linked to or had a bearing on village and household level ODF status.

4.1.2 PHASE 2 - HOUSEHOLD LEVEL DATA

The bulk of the data collected in Phase 2 was at the household level. As described in Section 3.2.3, in addition to collecting some observational data (similar to Phase 1) and completing a short questionnaire, investigating the reasons behind household decision making with regard to their latrines commenced with the Latrine Timeline. Using this tool enumerators assisted householders to cast their minds back to key points in the history of their latrines in an attempt to recall the most significant factors that motivated their decisions, and either facilitated or hindered them to act on their decisions. Households were asked to think both about the reasons for building their first latrine, and then the reasons for their current latrine status.

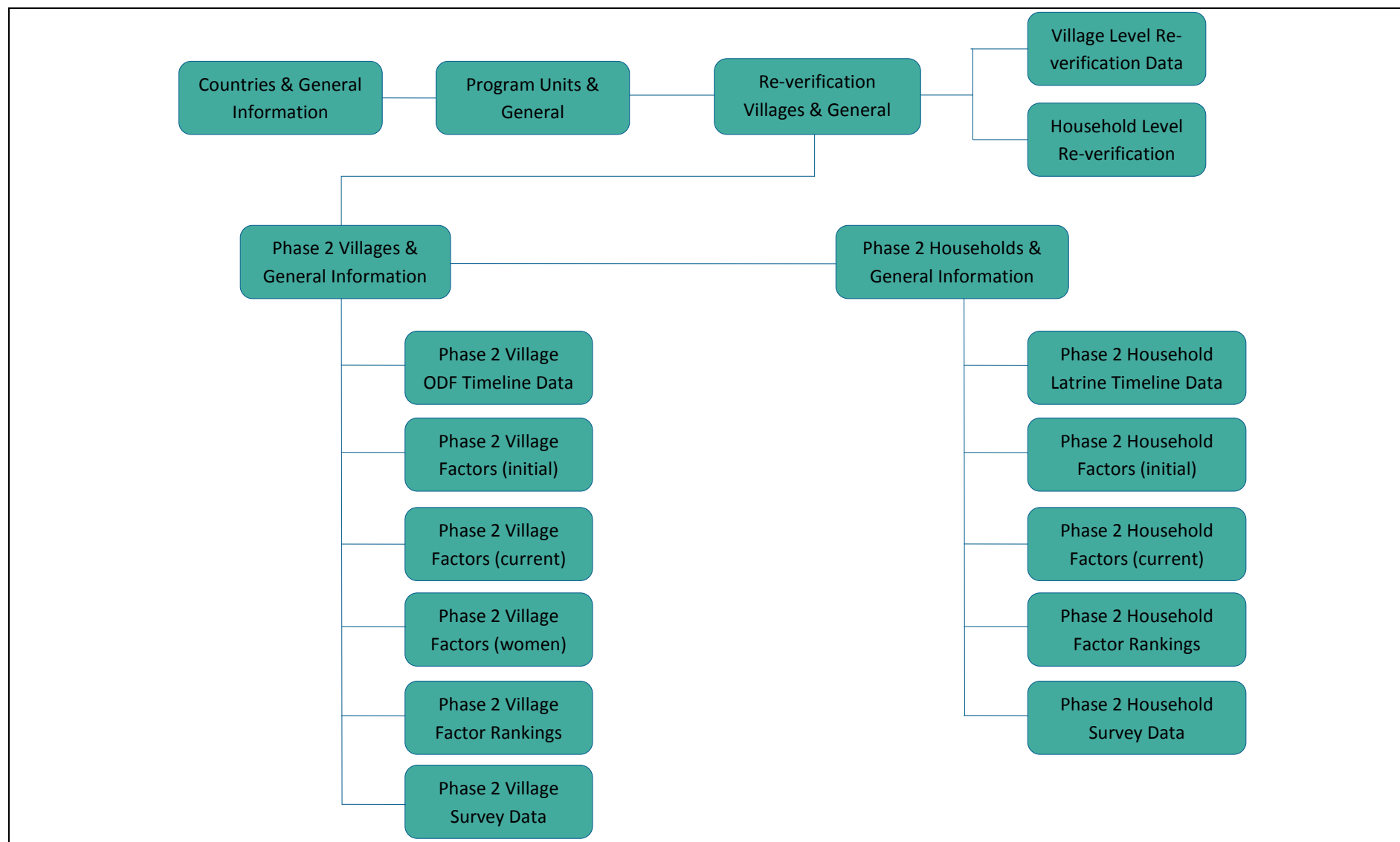


Figure 1 – Structure of the Relational Access Database

INITIAL AND CURRENT LATRINE STATUS

Initial latrine status was considered important for two reasons. Firstly, it set a baseline against which the current latrine status data could be compared – which was important in some (but not all) of the factor analysis which is presented in Sections 4.3 and 4.4. Secondly, the process of thinking back to the decision to construct a latrine served as a warm-up to the more significant process of thinking back to the time when the household decided either to repair/replace their latrine, or to abandon it and revert to OD. Most of the significant qualitative information used to answer research questions 2 and 3 came from this latter process.

When thinking back to the initial decision to build a latrine, no ranking or prioritising of the factors was done and so the recorded list is essentially a brainstorm of factors with no weighting or prioritisation. Where it has been used, the analysis is based solely on the number of times a particular factor was mentioned.

When considering the current status of their latrines, in addition to the brainstorm of issues and factors that influenced their decisions, households were also asked to rank the factors they nominated in order of importance and the results presented below have drawn upon both the brainstormed list and the ranking. As described above, men and women were asked to do this ranking separately.

LATRINE TIMELINE DATA

The latrine timelines allowed households to be classified according to what had happened to their latrines since ODF certification – referred to in the proceeding sections as *Breakdown History* – thus providing a slightly more nuanced classification than simply ‘OD’ or ‘ODF’. For households that were still ODF at the time of Phase 2, the latrine timeline allowed them to be further classified as either households whose latrines had never experienced major breakdown (NB), or those whose latrine had experienced a breakdown and had subsequently been repaired (R). For households that were OD at the time of Phase 2, they were further classified as households whose latrine experienced a breakdown and then been abandoned without being repaired (NR) or those whose latrine experienced a breakdown which was repaired, but then subsequently experienced another breakdown after which time the latrine was abandoned (R&A).



Latrine Timeline, Shebedino, Ethiopia

Table 6 presents this data by country. It can be seen that a number of households in each country are excluded from this data set. This is due to either a lack of clarity about household breakdown history in the timeline data set or simply missing data.

Table 6 – Household Breakdown History by Country

Country	Total	ODF Households		OD Households		No Data
		NB	R	NR	R&A	
Ethiopia	477	186	201	44	26	20
Kenya	284	34	82	90	30	48
Sierra Leone	213	156	10	12	0	35
Uganda	238	102	35	67	1	35
Total	1212	478	328	213	57	138

EXTENT OF THE DATA SET

Total Recorded Factors

The 1212 households that participated in Phase 2 reported a total of 8227 factors for initially constructing a latrine and 8140 for the current status of their latrine. Table 7 gives a breakdown of these by country.

Table 7 – Numbers of recorded factors by Country and Household ODF Status

Country	Total			ODF Households				OD Households			
				Motivating		Facilitating		De-motivating		De-facilitating	
	Initial	Current	#HHs	Initial	Current	Initial	Current	Initial	Current	Initial	Current
Ethiopia	3618	3455	477	1700	1699	1481	1424	230	168	206	162
Kenya	1727	1880	284	627	730	430	438	406	424	248	264
Sierra Leone	1792	1658	213	955	903	753	691	47	36	37	28
Uganda	1090	1147	238	544	508	251	317	214	183	69	128
Total	8227	8140	1212	3826	3840	2915	2870	897	811	560	582

Table 8 presents the same data but as an average number of factors recorded per household. This gives an indication of the extent of the discussions that took place during the latrine timeline process, and is also an indicator of the uniformity of the process as applied across the study. It shows little variation across the four countries, and although OD households on average were slightly less forthcoming than ODF households, the difference is slight, which is perhaps indicative of the process being successful at getting OD households to engage to much the same extent as ODF households.

Table 8 – Average Numbers of recorded factors per Household by Country and Household ODF Status

Program Unit	Total			ODF Households				OD Households			
				Motivating		Facilitating		De-motivating		De-facilitating	
	Initial	Current	#HHs	Initial	Current	Initial	Current	Initial	Current	Initial	Current
Ethiopia	8	7	4	4	4	4	3	3	2	3	2
Kenya	6	7	4	5	3	3	3	3	4	2	3
Sierra Leone	8	8	5	4	4	3	4	4	3	3	2
Uganda	5	5	3	3	2	2	3	3	2	1	2

Ranked Factors

As described in Section 3.2.3, following the ‘brainstorm’ discussion of current factors influencing their decisions, households were then asked to rank the top five factors in order of importance. The process allowed for both men and women to rank the top five motivating/de-motivating as well as the top five facilitating/de-facilitating factors, which meant that a maximum of 20 factors could be recorded per household.

Table 9 shows the average number of ranked factors per household by PU and ODF status. Although the process was intended to limit the number of ranked factors recorded per household to five or fewer, in fact, as Table 9 illustrates, some houses recorded more and many recorded less. Thus, when the households were asked to do the rankings, if they had generated more than five, the remaining ones were effectively eliminated from the ranked factor data set, and where households had generated less than 5, all of them transferred across. In some households, ranked factors were not recorded for all or some sub-groupings (male/female; motivating/facilitating).

The result of this is a diminishing number of factors recorded as the ranking increases; most households have factors recorded against the number 1 and 2 rankings, with the numbers of factors recorded against 3 – 5 dropping away. In order to account for this variation, the analysis of the ranked factors described in the sections that follow used only the first three ranked factors rather than all five.

Table 9 – Average Numbers of Ranked Factors Recorded per Household by PU and ODF Status

Program Unit	Total	ODF Households		OD Households	
		Motivating	Facilitating	De-motivating	De-facilitating
Ethiopia	13	8	7	4	4
Kenya	9	5	4	4	4
Sierra Leone	16	9	7	8	7
Uganda	6	4	3	3	2

Recorded Comments

The process intended for the enumerators to record the comments made by householders in full (or summarised) and for the factor classification to be done later. In several locations (predominately in Ethiopia) this did not happen and the factors only were recorded. This removed the possibility of checking the enumerators' classifications which decreases the reliability of the data set in these instances. The results are presented here on the assumption that the factors were classified correctly even where no comments were recorded. If possible, it would be worth investigating this through a close analysis of the actual data sheets used in the villages, voice recordings (if any) and interviews with the enumerators (where feasible).

4.1.3 PHASE 2 - VILLAGE LEVEL DATA

In addition to the household level data described in the previous section, village level data was also collected in each of the 52 Phase 2 villages¹⁶ through a series of focus group discussions conducted with village leaders and other key stakeholders (refer Section 3.2.2). Similar to the latrine timeline tool, the FGDs with community leaders utilised a village ODF timeline to elicit factors that the participants considered important in driving household level decisions about their latrines, the purpose being to cross check those factors that emerged from the household level data. Men and women's FGDs were conducted separately, with the women's discussion also specifically asked to include menstrual hygiene issues. Some general village level information was also collected through a short questionnaire.

¹⁶ The methodology planned for 10 villages per PU, however in Kenya, due to resource limitations, only 6 villages per PU were selected.

A total of 1021 community members participated in these discussions, of which 494 were women and 527 were men. The positions of the participants were numerous, but generally consisted of village chiefs or leaders, school principals/teachers, health workers, CLTS committee members or natural leaders, youth leaders and general community members.

The structure of the village level data is similar to that of the household level data. Timeline information was recorded and used to cross check the dates of significant village events such as triggering and ODF certification. Factors that the groups identified as important for influencing initial decisions to build latrines, as well as for current status, were recorded - the latter also being ranked.

EXTENT OF THE DATA SET

Table 10 below shows the total numbers of factors recorded by country, broken down by factor type, for both initial and current factors.

Table 10 – Numbers of Village level recorded factors by PU

Program Unit	Total			Motivators		Enablers		De-Motivators	Barriers
	Initial	Current	#Villages	Initial	Current	Initial	Current	Current	
Ethiopia	186	191	20	186	186	0	0	0	5
Kenya	150	212	12	97	81	52	35	65	31
Sierra Leone	168	161	10	98	88	70	0	68	5
Uganda	126	129	10	79	56	41	1	61	11
Total	630	693	52	460	411	163	36	194	52

Unlike the household level data, whereby the ODF status of the household refers to the presence or not of a functioning latrine, ODF or OD classifications for the village level data refers to the focus of the discussion. Where the proportion of OD households in a village was high, the discussions focused on OD households. Similarly, for villages with a high proportion of ODF households, the discussions focused on ODF households. Where the proportions were closer to being equal, the discussion was duplicated, and so two sets of factors etc. were recorded, and marked 'OD' and 'ODF' accordingly.

VILLAGE CLASSIFICATION

Household ODF status was measured both at Phase 1 (re-verification) as well as Phase 2. On the assumption that all households in all villages had a latrine at ODF certification,¹⁷ slippage was measured by the proportion of households that no longer had a functioning latrine. On this basis, a classification of village types was done to guide the purposive sampling for Phase 2 and, as described in Section 3.2.2 above, three village types – Practicing, Medium and Weak ODF – were defined.

Once the Phase 2 data collection was complete, however, a more refined classification system was used for the analysis, based not only on the presence of a functioning latrine but also the presence of hand washing facilities. Three classification levels were again defined – Types 1 to 3 – with Type 1 villages having the highest number of households with both latrines and hand washing facilities, Type 3 villages having the lowest and Type 2 villages in between. It is interesting to note that whilst

¹⁷ Although the analysis suggests that a proportion of households in some PUs were in fact sharing at ODF certification.

there is some overlap between the two classification systems, the differences are marked enough to highlight the importance of focusing on both latrines and hand washing facilities.

4.1.4 HOUSEHOLD DEMOGRAPHICS

This section sets out some basic demographic data that has been drawn from the two data sets, as well as some broad brush analysis of where this has a bearing on ODF status or village type.

Table 11 shows the breakdown of household members by village type and ODF status respectively. It can be seen that households in Type 1 villages are slightly larger on average, and whilst the average household size is the same for both OD and ODF households there is a slightly higher proportion of old people living in households that have abandoned their latrines.

Table 11 – Average Household Members by Village Type and ODF Status

HH Member	Total	Type 3	Type 2	Type 1	OD HHs	ODF HHs
Men	1.8	1.7	1.6	2.2	1.5	1.8
Women	1.8	1.6	1.6	2.2	1.5	1.8
Boys	2.3	2.2	2.2	2.5	2.2	2.3
Girls	2.3	2.2	2.2	2.5	2.2	2.3
Infants	1.0	1.0	1.0	1.0	1.0	1.0
Old Men	1.5	1.6	1.4	1.5	1.9	1.4
Old Women	1.3	1.3	1.2	1.3	1.5	1.2
Total	12	11.6	11.2	13.2	11.8	11.8

The purposive sampling process used to select the Phase 2 villages deliberately sought to ensure that the proportion of female headed houses was equal to that in the villages that were re-verified. This was done on a village-by-village basis and the results are reflected in the figures contained in Table 12. They show that the process was successful across the study generally, but there was slight variation across the PUs.

The data is disaggregated by household ODF status which shows that, across the study, there is a higher proportion of female headed households amongst OD households than ODF. It can also be seen that this trend is greatest in Jimma but is also reflected across the total population (for re-verification) but not everywhere for the Phase 2 data. This is likely due to the purposive sampling as well as some distortion of the figures due to the way the study was conducted in several PUs (notably Shebedino and Port Loko) and is discussed in more detail in Section 3.2.2.

Table 12 –Proportion of Households that were Female-Headed in both Study Phases

Country	Program Unit	Re-verification			Phase 2		
		Total	OD	ODF	Total	OD	ODF
Ethiopia	Jimma	10%	28%	7%	10%	22%	6%
	Shebedino	9%	8%	9%	10%	0%	11%
Kenya	Kilifi	26%	31%	25%	25%	28%	23%
	Homabay	35%	36%	34%	33%	25%	39%
Sierra Leone	Moyamba	20%	22%	19%	25%	na	25%
	Port Loko	11%	4%	13%	16%	8%	18%
Uganda	Tororo	19%	27%	18%	21%	27%	18%
	Total	17%	25%	16%	19%	24%	17%

4.2 SLIPPAGE RATES

This section presents a summary of the results that relate to research question 1: ***What percentage of households are still ODF?*** Drawing primarily on the data collected in Phase 1 of the study, the levels of slippage across the study are presented making reference to various ways in which ODF status (or reversion to OD) can be defined. It also examines the issue of the change of ODF status of households between the two phases of the study.

4.2.1 RESULTS OF RE-VERIFICATION

As discussed in Section 3.2.2, for the purposes of selecting villages and households for inclusion in Phase 2 of the study, slippage was defined as the household transition from maintaining a functioning latrine to abandoning it. More broadly, however, slippage is the term used to describe households moving from ODF status to OD status. As outlined in Section 3.1, for a household to be classified as ODF, many more criteria must be met than simply having a functioning latrine – criteria that vary from country to country – and so the response to the first research question depends on how many of these criteria are applied at re-verification.

It is unlikely that the transition from ODF to OD happens instantaneously – that households fail to maintain latrines, abandon hand washing facilities, cease covering the hole and all household members revert to defecating in the open at the same time. The re-verification data shows that at the time of data collection, all possible household ODF statuses were represented, supporting the notion that the transition happens over time. As the re-verification exercise was a one-off event, it was not possible to determine whether there is a pattern to how households abandon their latrines; conducting a series of such exercises over time in a longitudinal study could shed light on this and provide valuable insight into early detection of households likely to abandon their latrines and is recommended for future research.

Household and Village ODF Status

Whilst households are verified as ODF, it is Villages that are declared and certified ODF. Whilst an ODF village is one in which all households are ODF, in reality there is a continuum between villages that have the majority of households ODF to those in which a significant proportion have reverted.

The following sections present the results of the re-verification exercise in terms of the various possible ODF statuses that households were in at the time of the data collection. These are:

- Presence or absence of a functioning latrine
- Evidence of excreta (OD) in the vicinity of the house
- Presence or absence of hand washing facilities with soap/ash
- Presence or absence of a barrier between faeces and the surrounding environment

It should be noted that the study worked on the assumption that at the time of ODF certification, all households in all villages met all these criteria – an assumption that is impossible to verify. In fact it is likely that less than perfect ODF verification processes will have let some households through that did not meet all the criteria. Thus the slippage figures presented are likely to be higher than the true figures, which on one hand means that the actual slippage is lower than indicated but on the other that the initial success at achieving ODF villages is also less than assumed.

PRESENCE OR ABSENCE OF A FUNCTIONING LATRINE

Table 13 presents the data on latrine abandonment at re-verification. As noted in the description of the methodology, the levels found at this phase were lower than anticipated¹⁸ ranging from 0% to 57% overall, with an average across the study of only 13%. This shows that, particularly in Ethiopia and to a lesser extent Uganda, Plan's CLTS programs have been successful at getting households to retain their latrines. In Kenya and Moyamba in Sierra Leone, the average figures for latrine abandonment are higher but, with a range of 19% - 24% across the PUs, still lower than was anticipated in the study hypothesis.

Table 13 – Latrine Abandonment Data from Phase 1 – Re-Verification based on presence of latrine only

Country	Program Unit	No of Villages	No of HHs surveyed	Average HHs per Village	Max Village Slippage Rate	Min Village Slippage Rate	Average Slippage Rate
Ethiopia	Jimma	23	788	34	41%	0%	9%
	Shebedino	28	953	34	32%	0%	8%
Kenya	Homabay	10	422	42	29%	16%	24%
	Kilifi	10	392	39	57%	6%	18%
Sierra Leone	Moyamba	9	300	33	37%	0%	19%
	Port Loko	11	209	19	33%	0%	11%
Uganda	Tororo	19	1860	98	23%	4%	13%
	Overall Study	108	4905	45	57%	0%	13%

The village with the highest level of abandonment at 57% – Jaribuni in Kilifi, Kenya – was in fact one of the first villages in Kenya to be declared ODF. The triggering and follow-up processes used here (and in some of the other individual villages with the poorest results) warrants some further investigation as they are significant outliers in comparison with the majority of villages surveyed (refer Annex E for a full list of re-verification villages).

EVIDENCE OF OD IN THE VICINITY OF THE HOUSE

The presence of a functioning latrine in a household or compound is no guarantee that all household members will actually use it. The household demographics presented in Section 4.1.4 showed a slightly higher number of elderly people living in households that no longer had a functioning latrine and anecdotally it is said that older people are more reluctant to change behaviour than are young people which is consistent with the indicative study findings.

Table 14 presents the data for households with evidence of OD – or excreta in the vicinity of the house – for the total sample and for households with and without functioning latrines. These figures are likely to be under representative as they are based on the enumerator's observations but show that in 8% of households that had a functioning latrine excreta was observed. On this basis, slippage across the study based on having a functioning latrine and everyone in the household using it is likely to be closer to 21% than 13%.

¹⁸ The hypothesis was that the study would find a range of village ODF statuses from predominately ODF to predominately OD.

Table 14 – Evidence of Excreta in the Vicinity of the House

Country	Program Unit	%age households with visible excreta	%age households with latrines & excreta	%age households without latrines & excreta
Ethiopia	Jimma	24%	24%	26%
	Shebedino	6%	1%	58%
Kenya	Homabay	13%	8%	25%
	Kilifi	9%	4%	28%
Sierra Leone	Moyamba	30%	31%	26%
	Port Loko	4%	3%	7%
Uganda	Tororo	5%	3%	19%
	Overall Study	11%	8%	26%

The data presented in Table 14 shows that, predictably, signs of excreta in households that do not have functioning latrines are much more prevalent than in households that do have functioning latrines. The levels vary quite dramatically between the PUs, with Jimma and Moyamba showing much higher levels of OD than the other PUs. Further investigation of health and hygiene promotion and the triggering processes in these PUs would be warranted.

HAND WASHING FACILITIES WITH SOAP/ASH

If the definition of slippage is broadened to require the presence of hand washing facilities – or hand washing facilities and soap or ash - for a household to be considered ODF then the picture changes. Table 15 presents the slippage data on this basis and it can be seen that slippage rates increase markedly when these extra criteria are added. These figures show that hand washing has not been well integrated into Plan's CLTS programs and that even where households have maintained facilities the use of soap or ash is very limited. The exception to this is in Shebedino where although the rates of hand washing are similar to the study average (37% of households have hand washing facilities at their latrines) soap or ash is almost always present where hand washing facilities exist.

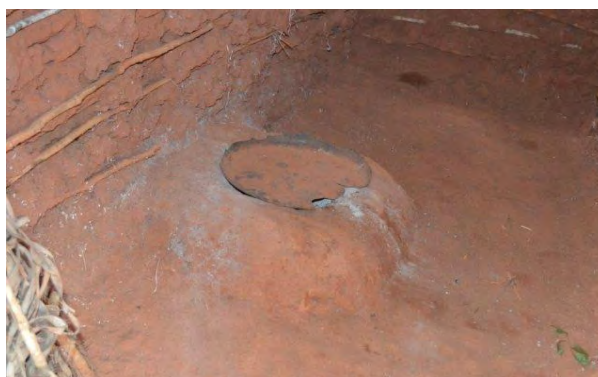
Table 15 – Slippage based on Hand washing Facilities

Country	Program Unit	Slippage based on Latrine, HWF & Soap/Ash		
		Latrine only	L & HWF	L, HWF & Soap
Ethiopia	Jimma	9%	86%	91%
	Shebedino	8%	63%	64%
Kenya	Homabay	24%	55%	83%
	Kilifi	18%	52%	67%
Sierra Leone	Moyamba	19%	65%	76%
	Port Loko	11%	56%	92%
Uganda	Tororo	13%	56%	72%
	Overall Study	13%	63%	75%

As well as recording the presence of hand washing facilities, enumerators were also asked to look for and record any signs or evidence of their use. Of the 37% of households that had latrines and hand washing facilities, signs of use were sighted in 83%, indicating that generally where hand washing facilities exist they are being used.

PRESENCE OF A LID/COVER

Another criteria used for verifying household ODF status, and a proxy of increased awareness of the importance of improved sanitation, is the presence of a lid or cover over the hole of a pit latrine or a water seal in a pour flush latrine. In fact, across the nearly 5000 households that were re-verified, only 9 were pour flush, 98 (2%) were VIP and the remainder simple pit latrines, requiring them to have lids or covers over the holes to differentiate them from being classed as fixed-point open defecation.



As with the previous tables, Table 16 re-presents the slippage data based on simply the presence or absence of a functioning latrine and then based on whether there was also a lid and whether or not it was over the hole at the time of the visit. Once again the figures show a dramatic increase in the slippage levels. Interestingly, in contrast to several of the other criteria, Moyamba emerges as the best performing PU here.

Latrine with Cover over Hole, Kilifi, Kenya

Table 16 – Slippage based on Latrines with Lids placed over the hole

Country	Program Unit	Slippage based on Latrine, Lids & Lid over hole		
		Latrine only	L & Lid	L, Lid over hole
Ethiopia	Jimma	9%	65%	83%
	Shebedino	8%	90%	93%
Kenya	Homabay	24%	71%	81%
	Kilifi	18%	50%	60%
Sierra Leone	Moyamba	19%	41%	47%
	Port Loko	11%	44%	55%
Uganda	Tororo	13%	83%	85%
	Overall Study	13%	74%	81%

OVERALL SLIPPAGE

Combining some or all of the criteria above presents a picture of the overall ODF status of the study PUs, based on the generic criteria list common to all countries. As stated above, the study results do not highlight any causal links between the criteria, so it is not known whether they are mutually exclusive or whether relationships exist. For example, if there is no lid over a latrine hole, is there also likely to be signs of OD? If there are signs of OD, are there less likely to be hand washing facilities? Investigating potential relationships between these criteria may yield interesting results.

Figure 2 presents the results of combining the criteria. It shows the slippage rates by PU and for the entire study as progressive criteria are applied and culminates on the right hand side of the figure in the slippage rates with all of the criteria applied. Whilst the regional variations can be seen in this graph, when all criteria are applied the slippage rates by PU range from 78% to 98% with an overall study slippage rate of 92%. Looking at individual villages across the four study countries, the range in percentage of households that would meet all the criteria outlined above is

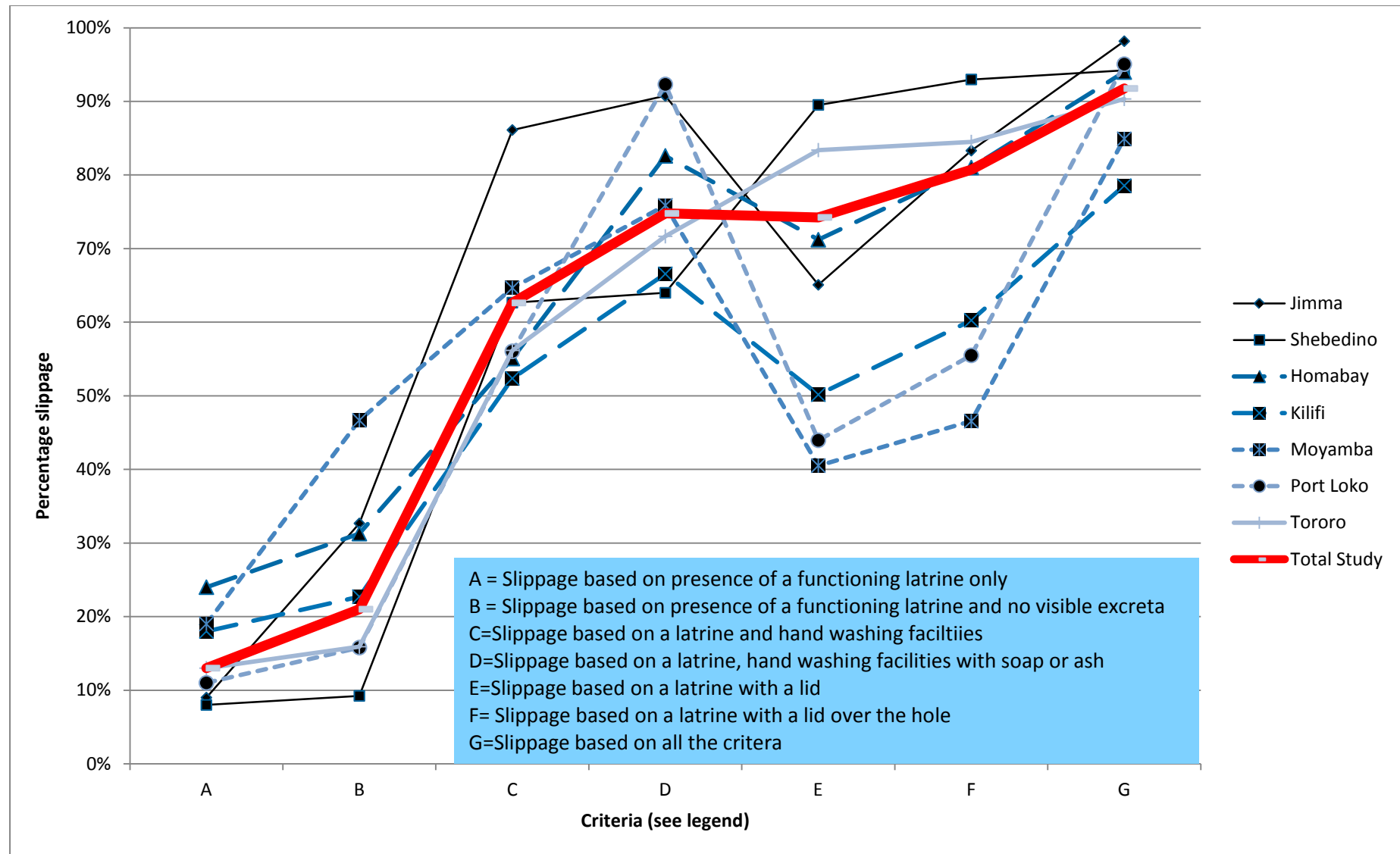


Figure 2 – Slippage Rates based on Various ODF Criteria

0 to 56%, with an average of 7% and a median of just 4%. It is clear from these figures that none of the 117 study villages would be declared ODF had they been verified at the time of the Phase 1 data collection.

For the remainder of this report, ODF status refers to the presence or absence of a functioning latrine. For the purposes of classifying villages, Type 1, 2 and 3 villages refer to those with high to low numbers respectively of households with functioning latrines and hand washing facilities.

4.2.2 CHANGE IN ODF STATUS BETWEEN STUDY PHASES

A period of three to four months (May/June – Sept/Oct 2012) elapsed between the two data collection phases of the study. Some of the latrine observational data that was collected during Phase 1 was also collected in Phase 2 for comparative purposes and it is interesting to note that in some locations ODF status (based on the presence or not of a functioning latrine) changed for some households.

Of the 1213 households that were sampled in Phase 2, 232 changed their status between Phase 1 and Phase 2; 68 reverted to no latrine whilst 164 built a latrine. Of the 164 that built a latrine, 101 were concentrated in 9 villages, which implies that some pressure may have been brought to bear on these households following the re-verification process – either from within (i.e. knowledge that the study was returning) or from an external agent such as Plan staff, local government or their communities. Interestingly, in these 9 villages only 17% of these households also built hand washing facilities (less than half the study average), meaning 83% of households that were motivated to build a latrine between the two phases were not sufficiently motivated or aware to also build hand washing facilities. For example, in Mamota, Shebedino all 10 of the OD households at re-verification had constructed latrines by Phase 2 but none of them also built hand washing facilities.

Table 17 shows the proportional change in the number of OD households in the samples by PU.

Table 17 – Proportional change in OD households in sample size, by PU

Country	PU	# HHs	# OD HHs P1	%age OD HHs P1	#OD HHs P2	%age OD HHs P2	%age change	%age change to ODF	%age change to OD
Ethiopia	Jimma	236	59	25%	63	27%	2%	0%	2%
	Shebedino	241	50	21%	12	5%	-16%	18%	2%
Kenya	Homabay	143	65	45%	67	47%	1%	5%	6%
	Kilifi	141	52	37%	57	40%	4%	3%	6%
Sierra Leone	Moyamba	121	56	46%	0	0%	-46%	46%	0%
	Port Loko	92	18	20%	12	13%	-7%	8%	1%
Uganda	Tororo	238	86	36%	79	33%	-3%	18%	15%
	Total	1212	386	32%	290	24%	-8%	14%	6%

Looking at the percentage change in the number of OD households at Phase 2 compared to Phase 1 it is clear that the biggest changes occurred in Shebedino and Moyamba (with 16% and 46% changes respectively). Possible reasons for this were discussed in the final workshop and are presented in Section 5.

That column, however, is the sum of changes in both directions (OD to ODF and ODF to OD). If the percentage changes in each direction are examined, in addition to further highlighting the issues mentioned in Shebedino and Port Loko, a further anomaly emerges in Tororo. Whilst the overall change from Phase 1 to Phase 2 is small (3%), there in fact has been a significant change in household status in each direction (18% of households built latrines and 15% of households abandoned latrines). The most likely explanation of this is that in some locations the enumerators did not return to the correct households in Phase 2 that were selected in the purposive sampling.

It was not possible to fully investigate these anomalies in the analysis presented in this report. As much of the analysis of Phase 2 data is disaggregated by PU, however, it is possible to gauge the sensitivity of the results to these anomalies by comparing across PUs. It should also be noted that the analysis presented in the following sections was primarily based on the Phase 2 data set and, to avoid the possibility of data from different houses being combined or compared, none of the analysis compared individual household data across the phases.

4.3 CONTINUING ODF HOUSEHOLDS

This section presents a summary of the results that relate to research question 2: ***What motivates households to remain ODF?*** It sets out the main motivating and facilitating factors separately, as well as any relevant correlations, and highlights variations or anomalies that emerged during the analysis.



Local Latrine with HWF, Kilifi, Kenya

There were a total of 922 ODF households in Phase 2 from which the data was drawn. These households articulated a total of 6738 factors, of which 3665 were motivating factors and 2756 were enabling factors. This group also nominated 6690 factors related to building their initial latrine, which were comprised of 3827 motivating and 2866 enabling factors.

4.3.1 MOTIVATING FACTORS

Of the 3665 total motivating factors nominated by ODF households, four different factors each accounted for at least 10% of the total and together accounted for 64% of the total nominations. These were:

- **Health (M7)** 22% of total motivating factor count
- **Shame, Disgust, Pride (M6)** 18% of total motivating factor count
- **Privacy, Security (M4)** 12% of total motivating factor count
- **Convenience, Comfort (M3)** 12% of total motivating factor count

These four were also the highest nominated factors for ODF households in each of the PUs and across each of the village types. Annex F contains information about counts for all the factors.

The same four were also the most commonly nominated factors given for why ODF households built their initial latrine, accounting for 63% of the total number of factors. This indicated that ODF households had not changed their motivations during the two or more years between ODF certification and the study.

A discussion of these four factors is set out in the following sections. The discussion presented is based on a frequency analysis for certain words, aimed at highlighting which aspects of the often multi-faceted factors were the most pertinent. Examples of comments made by households are given to explain the most significant points. Where relevant, additional analysis is presented that draws on the wider data sets, in an attempt to further probe the factors and so the motives behind household sanitation decisions.

HEALTH (M7)

Description of Factor:

The extent to which users perceived that health is improved by using a latrine and hence worth the effort to build or maintain. Includes improving the health of family members, particularly children.

Probing questions were

- What are the health reasons/benefits for using a latrine?
- What improvements have you noticed in your family's health?

Summary of Results/Analysis:

- Mentioned by 794 (22%) ODF households. Ranked in top 3 by M/F:580/682 (28%/28%) respectively
- Health was the most commonly nominated factor overall and by men and women.
- Households linked latrine use with a reduction in the incidence of diseases as well as savings through having to go less often to the clinic.
- It seems that perceived or real health benefits from latrine use are a significant motivator for continued use.
- Households nominating this factor – as well as ODF households - had a better knowledge of the importance of hand washing. However this varied geographically, with Kenya and Sierra Leone showing less correlation, suggesting a variation in the way hygiene promotion is done.

Health is not widely considered to be a strong motivator for latrine adoption,¹⁹ yet health was by far the most commonly nominated factor by ODF households for why they have a latrine – 22% of the motivating factors. Figure 3 shows that men and women prioritized health equally and as the most important factor influencing their decisions about their latrines.

¹⁹ Val Curtis, Keynote presentation, WASH Conference, Brisbane 2011

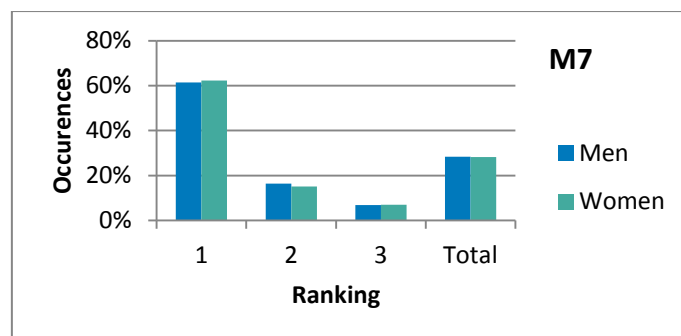


Figure 3 – Men and Women's Factor Rankings for M7

ODF Households linked health closely to disease, particularly the reduction in the incidences of disease amongst household members as a result of latrine use. This can be illustrated by examining the recorded comments against this factor and counting the frequency of certain key words. For example, the word 'health' itself was mentioned in 23% of the comments, as in:

"We no longer go to the clinic for cholera or dysentery cases. Our household is much better in terms of health" - Taninihun, Sierra Leone,

"There is better health in the family compared to the time before we had toilet." – Misufini, Kenya.

The word 'disease' was mentioned in 59% of the comments along with specific conditions such as diarrhoea, cholera, dysentery, vomiting, stomach ache etc. 40% mentioned 'cholera', and 47% mentioned 'diarrhoea' – for example:

'Wanted to avoid diseases such as diarrhoea' - Aputir Central, Uganda.

'Latrines have prevented spread of diarrhoea diseases like cholera, especially childhood vomiting and diarrhoea.' – Kamsure, Kenya.

16% of the comments mentioned controlling 'flies' as vectors for spreading disease, and a similar number 'preventing' or 'stopping' diseases or disease outbreaks generally:

'Disease prevention e.g. cholera, diarrhoea, avoiding flies that transmit diseases.' – Kajarau North East, Uganda.

'We want to prevent diseases like diarrhoea, feet itching. There is need to have the home clean all the time since it's our dwelling place, shit must be kept away.' – Aputir West, Uganda.

10% mentioned saving money by needing to go less to the clinic:

'I want to stop my family [having] frequent visits to the clinic. I also want to keep my household healthy and to save money.' – Manjendu, Sierra Leone.

'Our toilet helps to reduce disease and save our money that we spend at the clinic' – Besase, Ethiopia.

Collectively, this points quite strongly to a link between health or health knowledge, and latrine use. What is not so clear is the causal direction of this relationship, i.e. does knowledge of health lead to latrine use or do those who have adopted latrine use for other reasons then subsequently develop a good understanding of health benefits? However, what can be said is that once people have had experience using a latrine, perceived or real health benefits seem to have provided motivation to continue use.

Knowledge of hand washing

In order to probe a little deeper into the link between health and latrine use, knowledge of hand washing was compared between OD and ODF households. As part of the survey, households were asked to nominate all the times that it is important to wash hands²⁰ and by awarding households a point for every separate occasion they nominated (from a standard list of nine critical times²¹), it was possible to quantify household knowledge of hand washing. The average household knowledge of hand washing was then compared²² for all ODF households and those (ODF households) that nominated health as a factor. The correlation was done for households that simply mentioned health as one of several factors that influenced their decisions, as well as households that ranked health first in the priority listing. As the ranking was done separately by men and women, the correlations could also be sex disaggregated.

The results are presented in Table 18 (dark grey represents a correlation with a confidence of 90% or better and light grey represents no difference between mean household scores). When looking at the entire study together, a strong correlation exists between knowledge of hand washing and both ODF households and households that nominated health as a factor – both ranked and unranked.

Table 18 – Correlations against Household Knowledge of Health

Country	PU	ODF Status	Nominated M7	Ranked M7 Men	Ranked M7 Women
Ethiopia	Country	0.00	0.00	0.25	0.00
	Jimma	0.00	0.00	0.15	0.08
	Shebedino	0.03	0.01	0.07	0.18
Kenya	Country	0.37	0.09	0.05	0.27
	Kilifi	0.12	0.07	0.13	0.30
	Homabay	0.25	0.35	0.13	0.39
Sierra Leone	PL / Moy'ba*	0.10	0.49	0.30	0.25
Uganda	Tororo	0.06	0.01	0.25	0.02
Overall Study		0.00	0.00	0.06	0.00

*Combined figures for Sierra Leone shown due to low numbers of villages

However, as Table 18 shows, a slightly different picture emerges when examining these correlations by country or PU. ODF households were found to have a higher average knowledge of hand washing than OD households in all countries except Kenya, and households that nominated health as a factor

²⁰ This was based on Access and Behavioural Outcome Indicators for Water, Sanitation and Hygiene, from the Hygiene Improvement Project, USAID 2010

²¹ Households were not shown the standard list, but were asked to nominate all the times they thought one should wash hands, and the enumerators marked the responses against the standard list.

²² Using the Two sided T-test

were also found to have a higher knowledge of hand washing in all PUs except Homabay and Port Loko. Yet when knowledge of hand washing was correlated against households that ranked health as the number one priority factor, no clear trend emerged. The data suggests that health and knowledge of hand washing are linked in Ethiopia and Uganda, but not in Kenya and Sierra Leone.

This picture is reinforced when knowledge of hand washing is correlated against the presence of hand washing facilities. P values of 0.002 and 0.015 were found in Ethiopia and Uganda respectively, but no correlations were found in Kenya or Sierra Leone. No correlation was found to exist either between knowledge of hand washing and village type, which suggests knowledge of hand washing varies geographically and so is perhaps related to health messaging - or a difference in the way hygiene messages were delivered in the various PUs. Further investigation into the different processes used across the study locations is warranted.

Interestingly, whilst in Kenya and Sierra Leone no correlation was found between knowledge of hand washing and the presence of hand washing facilities, a strong ($P=0$) correlation was found across the whole study between knowledge of hand washing and evidence of use of hand washing facilities.

SHAME, DISGUST, PRIDE (M6)

Description of Factor:

Motivation arising from a sense of shame or disgust either at the thought of ingesting excreta or being observed defecating; and conversely, a sense of pride in having access to or being able to use a latrine and hence not ingesting excreta or being observed defecating.

Probing questions were:

- How does open defecation make you feel? Do you feel ashamed about your own OD or others?
- Does pride in having a latrine motivate you to continue to use and maintain it?
- How do you feel about your latrine/environment when visitors come to your house or village?
- What fears do you have for your family regarding OD practice

Summary of Results/Analysis:

- Mentioned by 646 (18%) ODF households. Ranked in top 3 by M/F:381/473 (19%/20%) respectively
- The negative emotions of shame and disgust are more prevalent than the positive ones such as pride, respect and dignity.
- They tended to drop away over time, which suggests they are good initial motivators but less so as time progresses.

The factor 'Shame, Disgust or Pride' (M6) encompasses a number of sub-factors - both negative and positive. It was the second most mentioned factor, and was rated more or less equally by men and women (refer Figure 4).

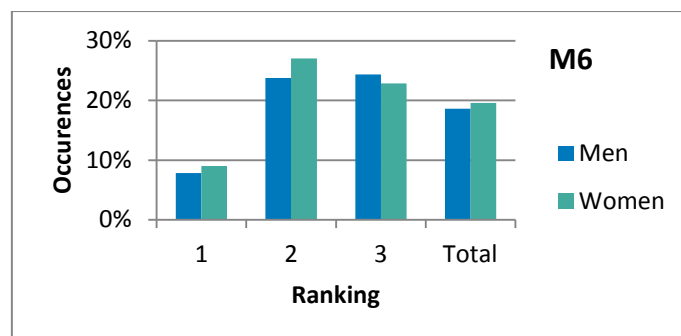


Figure 4 – Men's and Women's Factor Rankings for M6

'Shame' or 'embarrassment' was the most common theme emerging from the comments, with these words mentioned in 58% of the comments about initially building a latrine and 44% of those about maintaining ODF status:

"There is shame to shit in the open place when people see you" – Atiri B, Uganda

'Disgust' was mentioned in 27% of the initial comments - often in conjunction with health or shame - but only 14% of current comments

'Fear of eating their own shit which was disgusting, unhealthy and unhygienic to the life of their family' – Ndori, Kenya

I feel disgust about the idea of eating shit and I am ashamed to send visitors to neighbours latrine' – Gbaneh, Sierra Leone

'Smell' – which is closely linked to disgust - was mentioned in around 10% of current comments

'Smell of faeces especially during the rainy season was disgusting. The availability of water in a nearby stream facilitated cleaning and hand washing.' – Manera, Kenya

'Avoiding bad smell from to make life better for family' – Odoro, Ethiopia;

'They no longer experience the bad smell of shit all over the area.' – Ngamani Bale, Kenya

It was also possible to see a change from initial to current comments in those households that rated this factor at both stages

Initial: 'It is very disgusting to see shit around. I hate smelling shit around my household'

Current: 'I will no longer take visitors to the bush to shit. I'm a very respectable man to see or smell shit around my household.' – Mokellay, Sierra Leone

This supports the idea that disgust is an important initial motivator but once people have been using a latrine for a long time this sense drops off. Most of these comments were from Kenya, with a lesser number from Sierra Leone, but none from Uganda - possibly indicating a difference in the triggering message delivered there. Further probing of this is warranted.

The more positive emotions, encapsulated by words such as 'pride' or 'proud' appeared in very few (4%) of comments. Also uncommon were 'dignity' or 'respect'.

'Having a latrine brings one pride...' – Manera, Kenya

‘The latrines give you respect especially when it comes to not being embarrassed as opposed to going to the open to do defecation’ – Atiri C, Uganda

The word ‘fear’ appears in about 7% of comments, but in this context mostly relating to shame, as in fear of being seen or fear of being shamed

‘Fear of eating shit...’ – Ngamani Bale, Kenya

‘Fear of being found shitting...’ – Umoja Ni Nguvu, Kenya

It would therefore seem that the negative emotions of shame and disgust are more powerful than positive ones such as pride, which generally fits with the standard CLTS message.

Attendance at Triggering

A central element of CLTS is the triggering process, of which the emotions of shame and disgust form a key part. Many of the tools used in triggering aim to shock people into the realisation that they are living amongst and coming into contact with high quantities of excreta, and the natural revulsion associated with this as well as the subsequent feelings of shame or embarrassment then jolt them into action. This ‘ignition’ moment is described in the literature²³ as a powerful force for change, and so it stands to reason that the more people who are involved in this process, the greater the community impetus to change.

Phase 2 collected information about household attendance at triggering events and this was used to see if there was any significant correlation between attendance and continued use of latrines.

The analysis looked at this from a number of angles, including:

- The total number of people from a household that attended the triggering
- The number of households (as a proportion of the total number in the village) in which at least one member attended
- The average proportion of a household that attended the triggering event

These were correlated by ODF status and were calculated for the whole study as well as for each country and PU. The results are shown in Table 19. Mean values for the two groups are shown and where they are shaded dark grey a positive correlation (i.e. in favour of ODF households) was found.

The results for the study as a whole indicate that attendance at triggering is important for ongoing latrine use and that it is important to get as many people, and as many households, attending as possible.

²³ Kar, K & Chambers, R: 2008. Handbook on Community-Led Total Sanitation. Institute of Development Studies

Table 19 – Attendance at Triggering vs. ODF Status by Location

Country PU	# People Attending		%age HHs Attending		%age HH Members Attending	
	ODF	OD	ODF	OD	ODF	OD
Ethiopia	1.33	1.18	80%	86%	28%	29%
Jimma	1.08	1.23	69%	88%	24%	30%
Shebedino	1.51	0.86	88%	71%	32%	22%
Kenya	0.71	0.69	64%	54%	16%	17%
Kilifi	0.61	0.92	60%	74%	12%	16%
Homabay	0.81	0.47	69%	37%	21%	17%
Sierra Leone*	2.56	2.00	94%	92%	27%	22%
Tororo	0.56	0.40	44%	33%	12%	13%
Whole Study	1.34	0.78	74%	57%	23%	19%

*Combined figures for Sierra Leone shown due to low numbers of villages

When looking at the disaggregated data, however, there is variation. The data for Sierra Leone (Port Loko/Moyamba) and Shebedino can be discounted as the number of OD households was very small. The results from the other locations indicates that the way the triggering process was conducted²⁴ was likely to be significant, as there are strong positive correlations in Tororo and Homabay, but mixed results elsewhere. In Jimma and Kilifi, negative correlations were found (meaning a higher proportion of OD households and household members attended triggering in these PUs) which is anomalous and requires further investigation.

The other aspect of attendance at triggering that the analysis investigated was who in the household (men, women, children etc.) attended the triggering event, to see whether this had a bearing on ODF sustainability. The results are presented in Table 20.

Table 20 – Mean Attendance Rates at Triggering by HH Member Type

	Type 1	Type 3	ODF HHs	OD HHs
Men	50%	61%	49%	32%
Women	61%	56%	60%	35%
Boys	7%	4%	5%	2%
Girls	7%	7%	5%	2%
Men only	5%	18%	8%	8%
Women only	10%	11%	12%	6%

These figures show that a much higher proportion of ODF households had an adult (man or women) attend than did OD households, indicating attendance by an adult (decision maker) is important. The greater difference in the figures for women also imply that women's attendance at triggering is possibly more significant than men's. This is reinforced by the attendance figures for Type 1 and Type 3 villages, which show that a higher proportion of men (and men only) in households in poorer performing villages attended, whereas the figures are roughly equal for women. Attendance by men only had no influence on whether households abandoned their latrines or not, whereas roughly twice as many households from which only women attended triggering have maintained their ODF status.

²⁴ ie the effectiveness of the triggering messages and the strength of the ignition moment

Whilst more work is required to make these statements definitively, these figures imply that attendance at the triggering is important, and that attendance by women is possibly more influential on ODF sustainability than attendance by men.

PRIVACY, SECURITY (M4)

Description of Factor:

Satisfaction with a latrine providing a location that is both private (i.e. free from observation by others) and secure against threats of harm that arise when defecating in the open (from animals, insects and other people)

Probing questions were

- Do you feel safe when you go to defecate (either in your latrine or practicing OD)?
- Are people happy with their latrine because they can defecate in private?
- Has a lack of privacy discouraged ongoing use of the latrine?
- How far is the latrine from the house?
- Is it easy to get to for everyone?
- Is it accessible at night?

Summary of Results/Analysis:

- Mentioned by 441 (12%) ODF households. Ranked in top 3 by M/F:249/287 (12%/12%) respectively
- The main issue with this factor seems to be the protection a latrine affords from snakes and insects.
- Despite issues around privacy during menstruation, dangers of attack when going to defecate in the bush, and lack of privacy generally, this does not appear to be a gendered issue, with both men and women rating this factor equally.

This factor potentially encompasses a number of concepts and was primarily focussed on the location of the latrine and how it afforded household members a safe, secure and private place to defecate. The recorded comments against this factor reveal that the main issue raised by households was safety from snakes and insects - mentioned in half of all comments

‘Prevent my family from wild animals like snakes and harmful insects’ – Futhu, Sierra Leone

‘She feels very safe when she goes to defecate in her latrine than the bush where she stands high risks of being bitten by a snake.’ – Aputir Central, Uganda

‘Fear of being bitten by snakes...’ – Ndori, Kenya

‘Security’ itself was hardly mentioned at all but safety, feeling or being safe also featured in around 20% of comments

‘No one can see you when shitting in the latrine and it’s very safe even at night.’ – Misufini, Kenya;

‘I feel safe when using latrine. That is why I continue using latrine.’ – Taba, Sierra Leone

‘We feel safe when we defecate in [a] latrine rather than in the bush’ – Egu, Ethiopia

Related to security or safety, ‘Rape’ was mentioned in 12% of the comments - but these were all in Sierra Leone – as were ‘Evil Spirits’ which were mentioned in around 18% of the comments

‘Latrine protects us from snakes bite and evil spirits in the bush. Also latrine protect my wife and children from being raped by men in the bush.’ – Taba, Sierra Leone

‘To prevent my female children from being raped by men in the village.’ – Mokellay, Sierra Leone

Men and women rated this factor more or less equally (refer Figure 5), which is surprising given women are generally more vulnerable to attack than men. Interestingly, in Sierra Leone, during the trial FGDs with women, the comment was made that their husbands were jealous of them if they went to the bush to defecate, fearing they were meeting with other men.

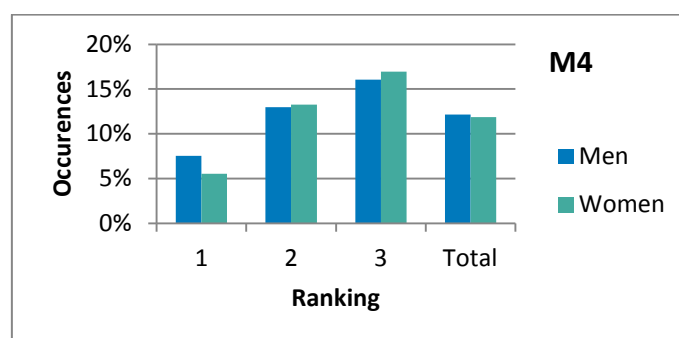


Figure 5 – Men and Women's Factor Rankings for M4

‘Privacy’ was mentioned in around 20% of the comments, but mostly linked with safety and security, as in

‘Latrine is private and you feel safe defecating since nobody sees you and you can even use it during rainy seasons’. – Wagogo, Kenya

‘The latrine gives me privacy where I feel safe and secure’ – Atiri B, Uganda

The link with menstrual hygiene does not seem to have been made, as this was mentioned on only a handful of occasions

‘They can dispose of their used sanitary towels without anybody noticing they are on her menstruals’ – Jaribuni, Kenya

CONVENIENCE, COMFORT (M3)

Description of Factor:

Motivation arising from a latrine providing greater ease of access for defecation and comfort when defecating when compared to open defecation.

Probing questions were

- Why is your latrine comfortable and convenient?
- Who in your household regards the latrine as comfortable and convenient? Explain.
- Are there facilities in latrine for menstruating women?
- How far is the latrine from the house?
- Is it easy to get to for everyone?
- Is it accessible at night? Or when it is raining?

Summary of Results/Analysis:

- Mentioned by 427 (12%) ODF households. Ranked in top 3 by M/F: 172/226 (8%/9%) respectively
- The comfort associated with not having to go to the bush to defecate, particularly at night or when it is raining is the main theme emerging from this factor.
- To a lesser degree, providing facilities for guests, and not having to share with neighbours, are also

valued.

The fourth most commonly mentioned motivating factor, convenience or comfort, relates to the extent to which a latrine near the house improves the ease of household members. As shown in Figure 6, this factor was not ranked highly as the first priority but increasingly so in the next two rankings. Men and women ranked it roughly equally.

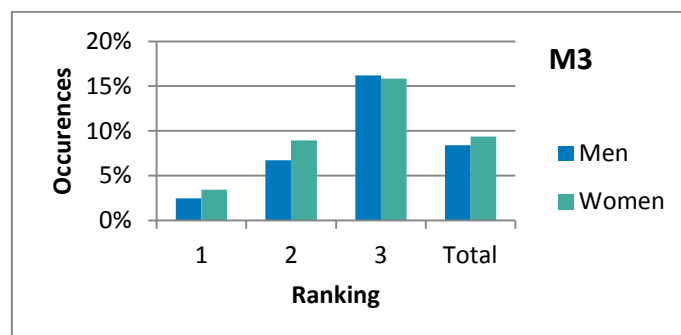


Figure 6 – Men's and Women's Rankings for M3

The themes that emerge from the comments associated with this factor are listed below.

Comfort or Comfortable: The word 'comfort' or 'comfortable' appeared in nearly 50% of the comments, as in

'It is more comfortable to shit in the latrine than shitting in the bush.' – Ngami Bale, Kenya

'My latrine is clean and very comfortable for me to use I can now access hand washing facilities in my latrine' – Makabu, Sierra Leone

Access/Proximity to the House: Accessing the latrine during rain or at night is mentioned in around 25% of comments

'One is able to use the latrine at all times even when it's raining – Akworot A, Uganda;

'My latrine has made it easier for me during times of need especially during the night since it is constructed just next to the house.' – Wagogo, Kenya

Related to this, 'Convenience' is mentioned in around 20% of comments –often alongside comfort, and often in conjunction with references to the latrine being close or near to the house

'The latrine is very comfortable and convenience for my household and it is not too far from the house.' – Mokellay, Sierra Leone;

'Having her own latrine makes her access it at any time even at night, since it's also close to the house.' – Manera, Kenya

Good for Visitors: 8% of comments referred to convenience specifically for visitors

"We felt shame when visitors ask for toilet, if we haven't it' – Jewaro, Ethiopia;

'Latrine was convenient especially when hosting visitors. They found a convenient place to shit.' – Rambusi, Kenya;

‘Having a latrine was convenient to the household because their visitors could find where to shit.’ – Kamsure, Kenya

Sharing with Neighbours: 7% of comments referred to the convenience of not having to either share their latrine with neighbours, or use the neighbour’s latrine. These were mostly in Sierra Leone.

‘Avoid using neighbour latrine, I feel more comfortable when I use my own latrine’ – Futha, Sierra Leone).

4.3.2 ENABLING FACTORS

ODF Households nominated 2756 enabling factors influencing their decision to maintain their latrines. As with motivating factors, the analysis focused on those that were nominated at least 10% of the time, which in this category meant the following five factors, accounting for 83% of the total:

- | | |
|---|------------------------------------|
| • Availability of Land, Materials, Labour (F2) | 28% of total enabling factor count |
| • Technical Advice, Knowledge (F5) | 16% of total enabling factor count |
| • Local Soil & Ground Conditions (F1) | 16% of total enabling factor count |
| • Affordability (F7) | 15% of total enabling factor count |
| • Availability of Water (F3) | 13% of total enabling factor count |

Again, there was consistency across all six PUs as well as village types in terms of the relative significance of these five factors. ODF households also prioritised the same five as their reasons for building their initial latrines, again indicating a consistency between enabling factors for building and maintaining.

The following sections set out an analysis of the five most significant factors, again based on a frequency analysis of commonly occurring words in the comments associated with each factor.

AVAILABILITY OF LAND, MATERIALS AND LABOUR (F2)

Description of Factor:

Ready availability of land, materials or labour making it easy to maintain or rebuild latrines when required

Probing questions were

- How did you get the following to build the latrine -
 - Land?
 - Materials – what materials? how acquired? cost?
 - Labour – who built? cost?
- How easy/difficult was it to get the above? If difficult explain why
- Is there space for you to move/rebuild your latrine if the pit fills up

Summary of Results/Analysis:

- Mentioned by 757 (28%) ODF households. Ranked in top 3 by M/F:609/709 (31%/31%) respectively
- The availability of free bush materials is the most significant component of this factor. Free and freely available land is also significant.
- Freely available labour from family also appears to be important, although households do recognize the need to pay for (skilled) labour at times
- An analysis of latrine construction materials confirmed that more durable materials resulted in latrines being less likely to need rebuilding.

Availability of land, materials and labour relates strongly to the ease by which a household could build or rebuild/repair their latrine. Both men and women ranked this factor highly (around 42 –

44% of all first ranked factors for both sexes), and more or less equally overall, as illustrated in Figure 7.

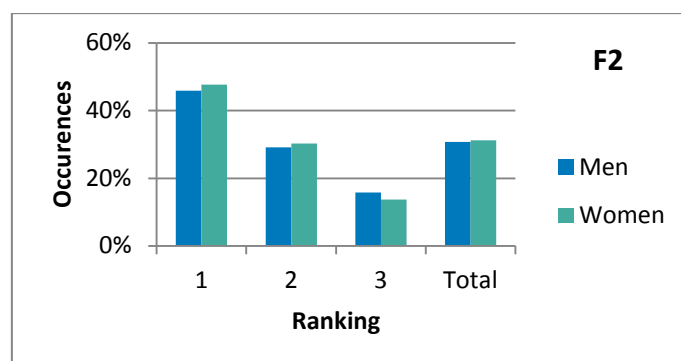


Figure 7 – Men's and Women's Ranking of F2

Of the three elements of this factor, access to cheap or free (bush) materials seems to be the most significant. 44% of the comments associated with F2 mentioned materials, including logs and poles, thatch and other local materials

'Available local materials such as poles and grass made work easier as he never bought them.' – Wagogo, Kenya;

'...there is plenty of wood material in the bush' – Besase, Ethiopia.

Around 10% of these specifically mention that the materials are free, which appears to be a strong incentive.

'Free materials in the bush, like thatch, sticks and rope' – Futha, Sierra Leone

References to 'land' or 'space' were made in 27% of the comments, including specifically mentioning room for future latrines when the current one fills up or fails. As with materials, the fact that the land is free seems to be significant.

'The poles are easily available at home. There is land for future extension or constructions' – Aputir West, Uganda

'There is enough land to build another latrine in case this one collapses' – Dzimanye, Kenya

24% of comments made reference to 'labour' or 'labourers'. In contrast to materials and land, however, there appears to be recognition that labour is often not free, although family labour also features strongly

'Availability of cheap labour for maintenance offered by husband and son.' – Kamsure, Kenya

'Family members gave their labour to help construct the latrine when it collapsed' – Manjendu, Sierra Leone).

Around 8% mentioned paying for labour, hiring labourers or masons

‘She had tools like hoe, axe, etc. that she used to sink the pit and construct a latrine. Labour was readily available as there was a son as well as the mason hired to construct the latrine’ – Aputir West, Uganda).

‘Labour is available in the community although we pay for it. The land is free - I own the land’ – Gbaneh, Sierra Leone

Further discussion of this factor is included below in Section 4.4.2 (DF2), as a lack of these items was also rated quite highly as a barrier to (OD) households repairing or rebuilding their latrines.

Materials used in Latrine Construction

The study collected observational data about the quality of the latrines, which was used to investigate potential correlations between initial construction and sustainability.

Table 21 shows a breakdown of the types of materials used for various components of the latrines in Type 1 and Type 3 villages. Whilst Type 1 villages tended to line the pits with wood, Type 3 villages had a higher proportion of masonry or stone lined pits. Type 1 villages had a slightly higher number of latrines with masonry walls, but also a higher proportion with no walls at all. The exception to this is Type 1 villages tending to have tin roofs more often than Type 3, whereas the latter had more thatched or plastic roofs.

Table 21 – Comparison of Materials used in Latrine Construction by Village Type

Material	Pit Lining		Floor/Slab		Walls		Roof		Door	
Material	Type 1	Type 3	Type 1	Type 3	Type 1	Type 3	Type 1	Type 3	Type 1	Type 3
Bamboo	0%	0%	0%	0%	3%	6%	0%	0%	1%	3%
Earth/Clay	0%	0%	69%	50%	31%	26%	0%	0%	0%	0%
Tin/Metal	0%	0%	0%	0%	4%	5%	14%	5%	7%	6%
Wood	11%	5%	19%	41%	15%	31%	0%	0%	6%	17%
Plastic	0%	1%	0%	1%	2%	4%	5%	8%	1%	1%
Thatch	0%	0%	0%	0%	20%	17%	51%	58%	0%	0%
Masonry	2%	3%	11%	8%	10%	6%	0%	0%	0%	0%
Stone	0%	3%	0%	1%	0%	0%	0%	0%	0%	0%
Cloth/Sack'g	0%	0%	0%	0%	9%	3%	0%	1%	33%	11%
None	87%	86%	na	na	4%	1%	29%	28%	52%	62%

To further explore the issue of latrine quality, a rating or score was assigned to the materials used to construct the various components of the latrine, with better quality (meaning more robust and probably more expensive) materials getting a higher rating. The overall quality of the latrine could then be quantified and on the basis of this overall score, a comparative analysis was carried out by village type. The results are consistent with those in Table 21 – i.e. there was no significant difference ($P=0.2$) between the mean quality scores between Type 1 and Type 3 villages.

The latrine quality score was also disaggregated by latrine breakdown history (for ODF households) – as described in Section 4.1.2 - Latrine Timeline Data. The scores of those households that had never experienced a breakdown were compared with those that had repaired their latrines at least once and the results show a statistically significant ($P=0.005$) correlation in favour of the former group. In other words, the better quality the latrine, the less likely it is to break down.

TECHNICAL ADVICE OR KNOWLEDGE (F5)

Description of Factor:

Availability of technical advice or expert knowledge about how to build or maintain good quality, durable infrastructure

Probing questions were

- Who advised you on how to build your latrine? Someone from in the village or outside the village?
- What advice did you receive?

Summary of Results/Analysis:

- Mentioned by 441 (16%) ODF households. Ranked in top 3 by M/F:338/334 (17%/15%) respectively
- ODF households appear to have received and made use of technical advice
- Advice has been received from both within communities – from artisans and contractors - and from without (Plan, health extension workers etc.).
- Households have received a range of advice relating to all aspects of their latrines, as well as general encouragement to use and maintain them.

Technical advice can come from within a community – from local artisans and contractors – or from external sources such as local government staff, Plan or others. The comments mention advice coming from a range of sources within the village, from village leaders, constructors (contractors), artisans, skilled family members, CLTS committee members and so on.

The word ‘advice’ appears in around a third of all comments. Advice coming from Plan accounts for around 13% of the comments, health workers/volunteers around 18% and a similar number from local artisans

‘The people from Plan together with the VHTS have encouraged her to continue using the latrine, when they come and check on her during their monitoring visits, they give her advice etc.’ – Aputir West, Uganda

‘Technical advice from local artisan on how to dig the latrine’ – Umoja, Kenya

ODF households seem to have sought advice and technical support from wherever they can get it - be it within their community or from outside. The other aspect of this factor that it was meant to encompass was the type of advice received. In a number of instances, there appears to be a blurring between technical advice on how to construct a latrine and simply encouragement to build a latrine

‘He hired a qualified artisan who had knowledge of constructing latrines and who advises him on what materials to use’ – Rambusi, Kenya

‘Plan and CLTSC members urge us to construct the latrine. They advise us to construct two apartment latrine. One for the women and one for the men.’ – Manjendu, Sierra Leone

‘The VHTs come around when doing the follow up visits and continuously encourage them to use their pit latrines.’ – Aputir West, Uganda

However, references are also made to specific types of technical advice – in particular how to dig the pits, slabs, walls, the roof and other general advice on the use of tools.

‘They were advised on how to dig a lasting pit by a local artisan.’ – Dzimanye, Kenya

‘There was advice from CHWs on how to use drums for roofing.’ – Ngamani, Kenya

‘The village contractor advise me on how to maintain my latrine. He also advise me to use big sticks to construct the wall of the latrine.’ – Manjendu, Sierra Leone

‘Some community members came to advise us to use tools that can make the work go faster’ – Gbaneh, Sierra Leone

References to ‘knowledge’ appear in around 12% of comments – with a mix of self-knowledge and knowledge gained from others

‘My own knowledge and advice from health workers made the situation’ – Deru, Ethiopia

‘Given knowledge on how to build latrine by Community Health Workers’ – Misufini, Kenya

Men tended to rate this factor slightly higher than women, as illustrated in Figure 8, although the difference is not great. This is perhaps due to men’s greater role in technical matters generally, although this is speculative and further investigation is needed to draw a definitive conclusion.

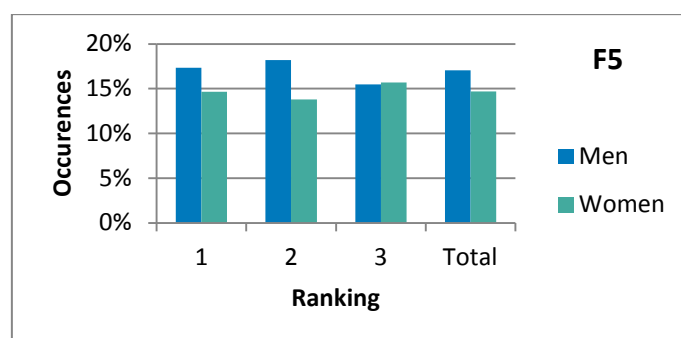


Figure 8 – Men’s and Women’s Ranking of F5

The analysis tested for a correlation between nominating this factor and the general quality of the latrines built – using a scoring system that rated the quality of various elements of the latrine by the materials used in their construction (described above) – compared with ODF households that did not mention the factor. No correlation ($P=0.49$) was found, however, suggesting that the technical advice did not influence the materials used in latrine construction.

LOCAL SOIL AND GROUND CONDITIONS (F1)

Description of Factor:

Aspects of the local ground conditions that either made digging a pit easier (e.g. soft soil) or was self-supporting and hence minimised the requirement for lining of pits

Probing questions were

- Describe the ground conditions which made building or repairing the latrine easy?
 - sandy soil - making the pit easy to dig?
 - rocky – making it self- supporting?
- What did you do to make it easier to dig? (e.g. building on anthill, finding a good site, etc.)

Summary of Results/Analysis:

- Mentioned by 433 (16%) ODF households. Ranked in top 3 by M/F:270/319 (14%/14%) respectively
- Ground conditions as an enabling factor predominately relate to how easy the soil is to dig, or how self-supporting the ground is.
- Poorer performing villages (Type 3) tended to have a higher incidence of soft soils, making them

easier to dig, but more likely to collapse.

It is an obvious statement to say that households cannot choose the soil types that they live on. However the attitude that the household takes in dealing with their soils is within their control and is to a certain extent dependant on their general attitude towards building a latrine. Although there are as many different soil types and ground conditions as there are communities, in general – or at least for the purposes of this study – ground conditions were classified as either ‘soft’ or ‘sandy’, ‘hard’ or ‘self-supporting’ (including clay), or ‘rocky’ (noting that there is overlap between the latter two).

The issues for households with regard to their soils and ground conditions is essentially how easy it is to dig, or how self-supporting the pits are. The comments reveal that households can view both soft and hard ground as positives – or enabling factors, as described below. Conversely, as is discussed in Section 4.4.2 (DF2), both of these can also be seen as barriers.

The highest number of comments (35%) made by ODF households that relate to local soil and ground conditions made reference to the ground being ‘soft’ or ‘easy to dig’

‘It is easy to dig and repair pit, local soil is soft’ – Egu, Ethiopia;

‘The soil type is soft making pit digging less costly for me.’ – Kamsure, Kenya

‘The soil is not very hard, make it easy to dig the pit, that’s one reason that made it easy to build the latrine.’ – Aputir West, Uganda

A slightly smaller number (around 27%) made reference to the ground being ‘hard’, ‘strong’ and/or ‘self-supporting’, particularly during the rainy season

‘Soil is hard and self-supporting and it can hold the latrine structure during rainy season.’ – Dzimanye, Kenya

The only other significant use of soil or dirt mentioned in the comments attributed to this factor relates to the use of soil for making mud blocks for building or repairing walls

‘The soil is always good to make mud blocks whenever we want to [make] repairs’ – Taninihun, Sierra Leone

The analysis sought to understand whether the soil type in a community had a bearing on household attitude towards their latrines. Soil type was not collected as part of the survey, however some information was collected at the village level from village heads during the re-verification exercise about the general nature of the soils in their villages. This was cross referenced against the general comments made by households that nominated F1 or DF1, and so an overview of ground conditions in most villages was obtained.

Table 22 shows the breakdown of ground conditions for Types 1 and 3 villages. It shows that Type 3 villages have a significantly higher incidence of soft soils – which are easier to dig, but also collapse more readily – than Type 1 villages. Additionally, Type 3 households have a higher incidence of rocky ground, but a lower incidence of hard ground (typically clay), than do Type 1 villages. Whilst hard

ground presents more of a challenge to dig, the end result is more robust and likely to experience less problems with collapsing than the softer soils.

Table 22 – Soil Types vs. Village Types

Soil Type	Type 1	Type 3
Soft	37%	69%
Hard	25%	10%
Rocky	0%	10%
Mixed	38%	11%

This tends to suggest that ground conditions are more challenging in villages that have been performing less well. Whilst households in these villages may be able to dig their latrines readily, without good pit lining – or the knowledge of how to adequately line the pit – there are likely to be higher failure rates as time progresses. As it turns out, Local Soil and Ground Conditions (DF1) was also a commonly nominated barrier factor given by OD households and so is discussed in further detail in Section 4.4.2 (DF2).

This factor – as an enabler – does not appear to be gendered, with men and women rating it more or less equally, as illustrated in Figure 9.

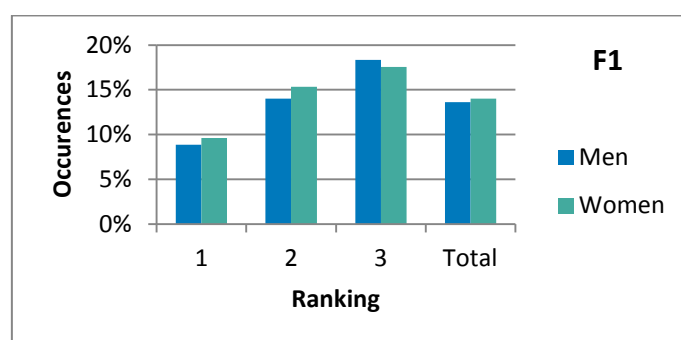


Figure 9 – Men's and Women's Factor Ranking for F1

AFFORDABILITY, COST (F7)

Description of Factor:

Availability of sufficient funds to purchase any necessary material or labour and a willingness within the household to spend money on these items.

Probing questions were

- How much did your latrine cost to build?
- How did you finance it?
- Did you have to borrow money to do it?
- How much does it cost to maintain (clean and repair) your latrine? Is that affordable?
- Can you afford to maintain your latrine? Could you afford to re-build it if it collapsed or the pit filled up?
- Did the availability or lack of credit for latrines influence you?
- What credit facilities are available in your area? Did you get a loan to build your latrine? Have you repaid it?
- Is it easy to get a loan? Could everyone in the village get one?
- What do you need to do to get the loan?

Summary of Results/Analysis:

- Mentioned by 408 (15%) ODF households. Ranked in top 3 by M/F:220/227 (11%/12%) respectively
- ODF households are clearly motivated to procure materials, with the majority spending money to

do so (as opposed to getting local materials for free).

- Mechanisms for obtaining money are working, selling goods or produce or getting money from family. Credit schemes do not feature, and receiving financial assistance from the broader community does not happen.

The affordability of a latrine as an enabling factor leans more towards the simple question of whether a household has access to a sufficient quantity of money to buy the necessary items (materials and/or labour) to construct or maintain their latrine than whether a household chooses to prioritise their latrine over other household expenditure. Whilst it is argued in Section 4.3.2 that not allocating resources to construction or maintenance of a latrine is related to motivation (DM6), here access to money is considered solely in terms of the mechanism by which households are able to afford their latrines, and so this is the focus of the analysis of the comments.

The highest proportion of comments (36%) make reference to households ‘buying’ or ‘paying’ for materials and/or labour

‘The family can also afford to buy nails and iron sheets to also repair and maintain their latrine.’ – Aputir West, Uganda

‘We were able to pay for the services provided by the local artisan.’ – Oria, Kenya

Many of the comments associated with this factor referred to the latrines as being cheap or affordable because of the availability of materials - which overlaps with F2. However, only 11% of the comments (all in Sierra Leone) said either local materials or the latrine itself were free, which further supports the observation that a significant proportion of ODF households did in fact spend money to procure materials

‘All the local materials that I use to construct the latrine was free.’ – Mokellay, Sierra Leone

A number of comments (6%) made reference to ‘selling’ something to raise money to purchase materials or labour, which points to a high level of motivation

‘She used the money she got from selling chicken to buy poles she used in the building of the latrine.’ – Aputir West, Uganda

‘Sold his cock and got money to purchase nails and pay labour for mixing mud.’ – Ndori, Kenya

Other mechanisms for raising money were employment, and family members

‘Sons contributed money to buy grass’ – Akworot B, Uganda

‘The man was employed and had enough money to construct the latrine and upgrade it.’ – Misufini, Kenya

Credit schemes, or borrowing money was not mentioned at all, and financial assistance from the broader community was only mentioned once.

As part of the survey questionnaire, households were asked to nominate where they had received financial assistance from, if any. This data is presented in Table 23, disaggregated by ODF status and village type.

Table 23 – Source of Financial Assistance to Households

Source	ODF households (#922)	OD households (#290)	Type 1 (# 262)	Type 3 (# 238)
Community	0%	0%	0%	0%
Family	16%	6%	14%	14%
None	84%	94%	86%	86%

This shows that a greater proportion of ODF households received financial assistance from family than OD households, and that village type had no effect on this. It also shows clearly that offers of financial assistance from outside the family were non-existent.

Women rated this factor slightly higher than men, however the difference was small, indicating that there is probably no gendered aspect to the factor (refer Figure 10)

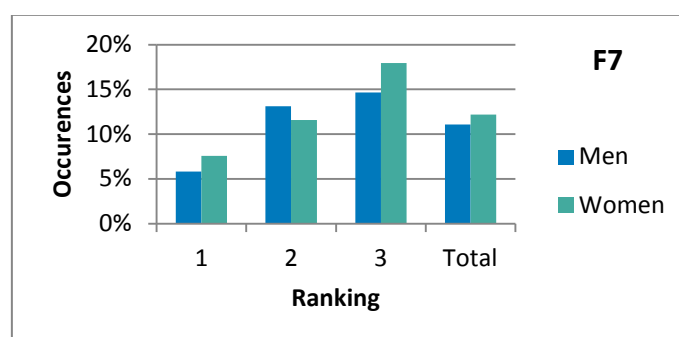


Figure 10 – Men's and Women's Ranking of F7

AVAILABILITY OF WATER (F3)

Description of Factor:

Reliable source of water in close proximity making the construction, repair and cleaning of latrines easier.

Probing questions were

- Does the water supply make it easy or difficult to use the latrine?
- Is there water for flushing? Cleaning? Hand washing?
- Where is the nearest water source? How far from the latrine?
- Whose job is it to collect and refill the water used in the hand washing facility?

Summary of Results/Analysis:

- Mentioned by 368 (13%) ODF households. Ranked in top 3 by M/F:245/300 (12%/13%) respectively
- Water supply as an enabler relates to water for construction/repair, or water for cleaning and hand washing. There were virtually no pour flush latrines in the study.
- Access to water was found to be a significant enabler for both latrine construction during initial building, as well as latrine cleaning and hand washing once the latrine is operational.

Household water collection and use is generally acknowledged to be the responsibility of women²⁵, yet availability of water was ranked more or less equally by men and women (see Figure 11). Across the entire study, however, virtually all latrines were dry – only 9 of the 4270 latrines observed in the reverification phase were pour flush and only 3 of these carried over into Phase 2. Water usage in

²⁵ For Her, It's a Big Issue: Putting women at the centre of water supply, sanitation and hygiene. Evidence Report produced by the Water Supply and Sanitation Collaborative Council (WSSCC) and WEDC, 2006.

relation to the latrines, therefore, is related to construction, maintenance and repair of latrines, or cleaning and use (e.g. hand washing). As the burden of responsibility for these activities is likely to be shared by both men and women, this would explain the equal rankings given to the factor. An examination of both the initial comments as well as the current indicate that construction/repair of latrines, as well as cleaning/use, were important, but at different times.

As a factor for initially enabling households to become ODF, around 37% of the comments refer to using water for 'building' or 'constructing' the latrines

'Water availability made it easy for us to build our latrine.' – Taninihun, Sierra Leone

'The water is available and easy to get for mixing the mud for making bricks to build the latrine walls and mud + cow dung to smear the floor and walls of the latrine.' – Aputir West, Uganda

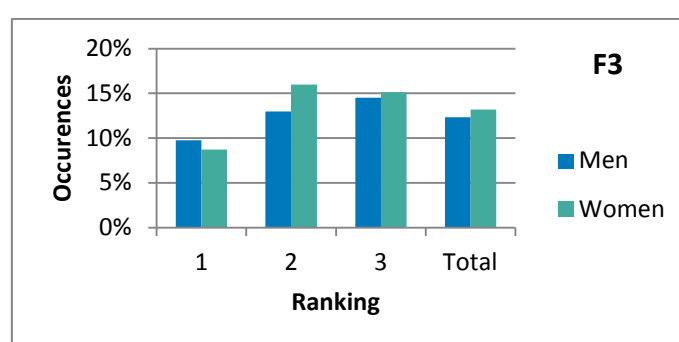


Figure 11 – Men's and Women's Ranking of F3

This occurs much less in the comments about maintaining current ODF status, occurring in just 11% of the current comments. Conversely only 3% of initial comments made reference to 'repairing' or 'replacing' latrines, compared to 12% of current comments

'Water can be got to mix the mud for replacing collapsed walls' – Atiri B, Uganda

26% of initial, compared to just 10% of the current, comments refer to 'mixing' mud or cement

'Water can be got to mix the mud for replacing collapsed walls' – Atiri B, Uganda

No references to cleaning are made at all in the initial comments, compared to 16% of the current comments - virtually all from Sierra Leone, with some from Kenya

'Water which is used for latrine cleaning is locally available at an affordable rate.' – Rambusi, Kenya

'Plenty of water is available for the daily cleaning of the latrine' – Gbaneh, Sierra Leone

Similarly, only 2% of the initial, but 19% of the current comments refer to 'hand washing'

'There is water near the homestead for refilling the hand washing facility' – Umojo Ni NGuvu, Kenya

Again, these are all from Sierra Leone and Kenya. The remainder just refer to water being available in the community without specifying a purpose

‘Availability of water from a nearby public stand tap.’ – Dzimanye, Kenya;

‘Water is always available since we have about three borehole surrounding us.’ – Kajarau North, Uganda

Dry season water collection times were collected as part of the survey questions and were used to check whether these had any bearing on household attitude and decision making. The data is presented in Table 24 and shows that across the study as a whole ODF households had shorter collection times than OD households. This can also be seen by looking at the latrine breakdown history of households.

Table 24 – Dry Season Water Collection Times vs. ODF Status and Breakdown History

Household Type	#HHs	30 minutes or less	31 to 60 minutes	1 hour to 3 hours	More than 3 hours	No Data
ODF	922	72%	14%	9%	1%	4%
OD	290	48%	21%	16%	2%	13%
Never broken	478	72%	15%	9%	0%	4%
Repaired	328	74%	14%	8%	2%	2%
Repaired & Abandoned	57	42%	25%	14%	2%	18%
Not repaired	213	52%	20%	17%	3%	8%
No Data	30	23%	20%	7%	0%	50%

Correlating dry season collection times with village type also reveals that in the better performing (Type 1) villages generally collection times are reduced, as illustrated in Table 25, further strengthening the link between water supply and latrine use (or maintenance).

Table 25 – Dry Season Water Collection Times vs. Village Type

Village Type	#HHs	30 minutes or less	31 to 60 minutes	1 hour to 3 hours	More than 3 hours
1	262	80%	8%	9%	2%
3	238	64%	27%	4%	0%

These figures were cross-referenced against villages that self-reported whether or not they had a water supply (refer Table 26). Across the whole study it was found that collection times did correlate with the presence of a village water supply. When disaggregated by PU the difference was less pronounced – particularly in Tororo where collection times were generally shorter in villages without a water supply. Interestingly, in several villages men and women actually disagreed regarding whether or not their village had a water supply. The reasons for this are unclear and warrant further investigation.

Table 26 – Dry Season Water Collection Times vs. Program Unit

Country	PU	Village Water Supply				No village Water Supply			
		30 minutes or less	31 to 60 minutes	1 hour to 3 hours	More than 3 hours	30 minutes or less	31 to 60 minutes	1 hour to 3 hours	More than 3 hours
Ethiopia	Jimma	59%	41%	0%	0%	58%	30%	12%	0%
	Shebedino	91%	7%	2%	0%	93%	8%	0%	0%
Kenya	Kilifi	65%	14%	11%	9%				
	Homabay	57%	18%	23%	2%				
Sierra Leone	P.L / Moy'ba*	98%	2%	0%	0%				
Uganda	Tororo	36%	28%	36%	0%	50%	25%	24%	1%
	Whole Study	72%	14%	12%	2%	65%	22%	12%	0%

*Combined figures for Sierra Leone shown due to low numbers of villages

4.4 HOUSEHOLDS REVERTING TO OD

This section sets out the main factors nominated by households as the reasons why they had chosen to abandon their latrines. The results presented here relate to research question 3: ***What are the primary causes of households reverting to OD?***

For ODF households, the same motivations that drove action to build a latrine initially in response to CLTS were reported as the motivations for maintaining that latrine some years later (as described in 4.3.1). OD households shared similar motivations to ODF households for initially building their latrines but over time a new set of factors emerged that caused OD households to abandon their latrines. These factors are the focus for this section.



Abandoned Latrine, Kilifi, Kenya

As with Section 4.3 above, motivating and facilitating factors are discussed separately. For OD households, who no longer had a functioning latrine at the time of the study, the factors are negative in the sense that they led to latrines being abandoned. Hence they are de-motivating factors (DM) and de-facilitating factors (DF) or barriers.

There were a total of 290 OD households in Phase 2 from which the data was drawn. These households articulated a total of 1226 factors, of which 707 were de-motivating factors and 519 were barriers. This group also nominated 1379 factors related to building their initial latrine, which were comprised of 852 motivating and 527 enabling factors.

4.4.1 DE-MOTIVATING FACTORS

Five de-motivating factors were identified that each were responsible for more than 10% of the 707 de-motivating factors nominated by households. These were:

- **Financial constraints (DM6)** 18% of total factor count
- **No more support (DM9)** 18% of total factor count
- **Inconvenience, discomfort (DM1)** 14% of total factor count
- **Maintenance, repairs (DM5)** 13% of total factor count
- **Shared with others (DM7)** 12% of total factor count

Each of these is discussed below.

FINANCIAL CONSTRAINTS (DM6)

Description of Factor:

De-motivation caused by the cost of building or continuing to use a latrine, including costs of repairing or maintaining it.

Probing questions were:

- How much did it cost to build your latrine?
- How much to re-build or maintain?
- Where did you get the money in the first place?

Summary of Results/Analysis:

- Mentioned by 118 (18%) ODF households. Ranked in top 3 by M/F:44/90 (13%/15%) respectively
- Lack of money/funds was the most common aspect mentioned in the comments about this factor (61% of comments)
- Amongst all 52 villages included in Phase 2, subsidies were only provided in one village (in the form of materials), so there was no influence of subsidies on household perceptions.
- Households nominating this factor spent the same as other OD households on building their latrines.
- Households that never repaired their latrine are slightly over-represented
- This factor was more important for women than men, but not over-represented in female headed households

Most of the comments made about this factor refer to a lack of funds to re-build or repair the latrine. The words 'money' or 'funds' appear in 61% of the comments and 'lack of' is mentioned in 46%:

'Lack of money - which I can engage someone to dig the latrine for me also de-motivated me.' – Akworot B, Uganda.

References are often made to other household expenses being more important:

I have no money to rebuild the latrine now I have to pay my children school fees' – Gbaneh, Sierra Leone;

'Lack of credit. She said that the little money that she gets, she uses it to buy food.' – Kajarau North, Uganda).

Consistent with the CLTS methodology, subsidies were not made available in the study villages, so any funds made available to build, repair or maintain the latrine came from households' own

resources. There was only one exception amongst the 52 Phase 2 villages, Jaribuni in Kenya, where a subsidy was offered in the form of materials. Even in this community, however, the subsidy did not appear to reach all households with one householder reporting that:

‘No credit facilities to give him support in cash or materials for building latrine.’ – Jaribuni, Kenya.

It may seem surprising that this factor, relating to a lack of funds, is included as a de-motivator rather than one of the barriers discussed in Section 4.4.2. If a household has no money to allocate to sanitation then perhaps this should be viewed as a barrier not a perception. The study takes the view, however, that all households have some income and resources and that the prime issue here is whether or not households prioritise sanitation over other forms of expenditure or resource allocation. This position is supported by (i) all households in the study having built their own latrine initially, even with local, non-commercial materials and (ii) almost every household only having built a simple pit latrine rather than more durable versions requiring commercial materials. Hence, analysis of the comments examined how households felt about spending funds on sanitation.

To test this concept about financial constraints being a perception or a barrier, use was made of the data about the amount spent on latrine construction. If lack of funds was a barrier, then it might be expected that those households nominating this factor would have fewer financial resources available to them and consequently would have spent less on building their latrines initially. This, however, was not the case. There was no statistical difference between the average initial expenditure on latrines by those households nominating financial constraints as a de-motivating factor and other OD households (\$19.73 compared to \$17.30, respectively, $P=0.35$).

Some of the comments about this factor highlighted issues with rebuilding latrines after they had collapsed, such as:

‘The sons had other financial engagements making them unable to finance construction of new latrine. “We experience constant collapse of latrines and construct new latrines of low quality hurriedly just to have latrines.”’ – Manera, Kenya

compared to 88% who had never repaired their latrines

‘The household did not have money to put up a new latrine after the collapse of the first one.’ – Ndori, Kenya

It is conceivable that for very poor households, financial constraints dissuaded them from initially carrying out any repairs. Alternatively, if households had rebuilt their latrine after an initial collapse only to have it fail again, it is conceivable that this extra financial burden would have dissuaded them from continuing to maintain their latrine. Neither of these outcomes was indicated by the timeline data. For the group of households who mentioned this factor (DM6), 12% had rebuilt their latrine before finally abandoning it and 88% had not. Across all OD households, a larger percentage had rebuilt their latrines (27%) - and hence incurred extra expense in doing so—and a similar, but slightly smaller percentage (73%) had abandoned their latrines without making any repairs.

This factor was more likely to be cited by women than men and was more often ranked by women as the number one de-motivating factor, as shown in Figure 12. The data was also checked to

determine whether this factor was over-represented in female headed households. This was found not to be the case.

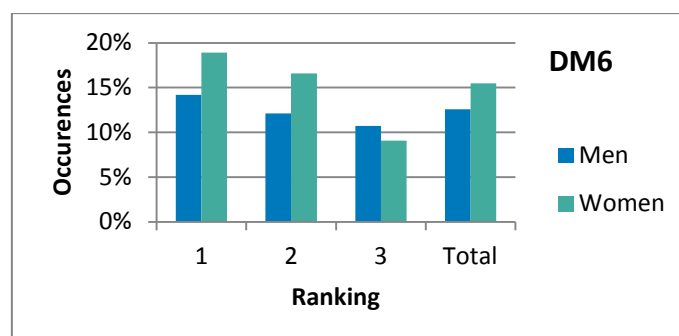


Figure 12 – Men's and Women's Factor Ranking for DM6

Expenditure on building, maintenance and repairs

Survey data was used to explore the amount spent by households in constructing their latrines and on subsequent maintenance. In particular, this was used to see if OD households spent less than ODF households, which might suggest that OD households had fewer financial resources than ODF households. The results are set out in Table 27 (converted into USD for comparison across the study countries) and compares expenditure for OD and ODF households and Type 1 and Type 3 villages. The OD and ODF household data is further divided into those that have and have not rebuilt their latrines. Not all households either knew or volunteered this information, so the data presented in the table is a subset of the total data set and the number of households in each sample group is noted.

Table 27 – Average Household Expenditure on Initial Latrine Construction

	Type 3	Type 1	OD HH	ODF HH	OD HH		ODF HH	
					NR HH	R&A HH	NB HH	R HH
Number of HHs	32	122	83	357	64	18	160	143
Expenditure – construction	\$11.79	\$15.25	\$13.55	\$14.55	\$13.16	\$15.61	\$17.66	\$11.35
Number of HHs	18	47	15	155	10	5	29	102
Expenditure - repairs	\$4.94	\$9.37	\$7.50	\$7.36	na	\$11.07	\$12.49	\$5.84

There is very little difference in construction expenditure and ongoing maintenance costs between ODF and OD households. ODF households spent slightly more on average than OD households on building their latrines but the same in maintenance. This strengthens the indication that OD reversion is not about access to financial resources.

There are differences however between village types with Type 1 villages having spent more on building their latrines and on maintenance than Type 3 villages. Also of note, amongst ODF households, those who had never needed to rebuild their latrines (NB) both spent more upfront on construction and more on maintenance than the ODF households whose latrines had required rebuilding. This suggests that spending funds on ongoing maintenance reduces the likelihood that a latrine will need rebuilding.

Financial elements of other factors

As is detailed in the following sections, there are financial aspects to several of the other most-commonly cited de-motivating factors. For example, as many as 30% of the comments for regarding purchase of materials and labour noted some financial constraint. The original study method had envisaged householder comments being allocated primary and secondary factors to deal with these overlapping motivations. As noted previously, however, this primary and secondary classification was not used by the enumerators. Nonetheless, this is not a serious shortcoming for two reasons. Firstly, DM6 was already the most significant de-motivating factor so if these comments were reclassified and added to DM6, it would only strengthen this result. Secondly, if expenditure is a prioritisation issue not an absolute constraint, then the most important question to be asked in response to DM6 is why have households not given sanitation expenditure greater priority.

NO MORE SUPPORT (DM9)

Description of Factor:

Reversion to OD because of a sense that households had not continued to receive support to maintain or improve their latrine from within their community (rather than support from outside the community which relates to factor DF5).

Probing questions were:

- What lack of support has made it difficult for you to maintain and rebuild your latrine?

Summary of Results/Analysis:

- Mentioned by 117 (18%) ODF households. Ranked in top 3 by M/F:33/85 (9%/15%) respectively
- This factor relates to family and community rather than external support from Plan or government
- It seems to be a gendered issue – women rated it more highly than men and it was over-represented in female headed households
- The survey results suggest community cohesion plays an important part, with households in Type 1 villages twice as likely to have received community support with their latrines than Type 3 villages.

Comments made by those households who raised this factor demonstrated that ‘support’ in this context was clearly either within the family or the community rather than from sources outside the community. Lack of community support was mentioned in a quarter of comments (24%)

‘The support for building the latrines from the community is no longer there.’ – Katsemerini, Kenya

Most commonly mentioned was lack of support from specific family members. References to ‘son’, ‘daughter’ or ‘child’ was made in 29% of comments and ‘husband’ or ‘wife’ in 23%

‘Laziness - my husband is just a lazy man, he doesn’t want to dig the pit latrine’ – Akworot B, Uganda

‘She is elderly and her children have moved to town and hence there is nobody to dig and construct latrine for her.’ – Ndori, Kenya

‘There is nobody to help her husband do the work, she claimed that she cannot help him to pull out the soil time for digging.’ – Atiri D, Uganda

A further 5% of the comments make general references to ‘family’.

None of the comments made reference to Plan or government. This type of external support, however, is explored below under Factor DF5.

As with financial constraints, this factor seemed more important to women than men. Women cited it more commonly overall and it was much more likely to be the highest priority factor for women than for men (Figure 13). Some 22% of the comments refer to widows

‘No more support since her husband and children had died.’ – Kajarau South, Uganda

or women living on their own

‘the men of this family went to Mombasa, so there is no one to support her.’ – Jaribuni, Kenya

This factor was also over-represented in female-headed households, where support from an extended family or the community may have been more critical to maintaining latrines than in other households. Female-headed households accounted for 32% of those households nominating this factor but only made up 24% of households across the study.

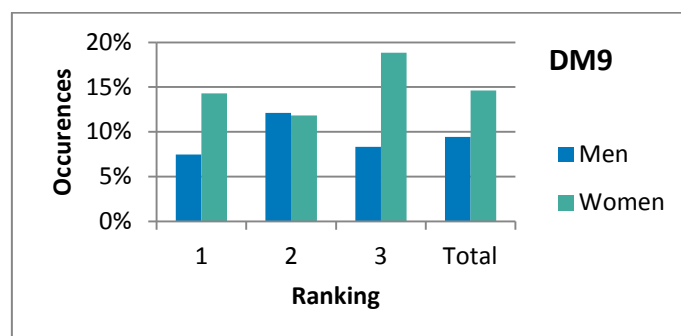


Figure 13 – Men's and Women's Factor Rankings for DM9

The lack of support for households citing this factor points to a possible lack of community cohesion. Analysis of the household survey data sought to investigate this further. In the survey, households were asked to nominate where they received support to build their latrines in terms of labour, materials and money. The source of financial assistance has already been discussed in Section 4.3.2 (F7) above, however Table 28 shows the data for materials and labour, disaggregating by ODF status and village type. This shows that ODF households received more support for labour from both their families and their communities (36% of ODF households compared to 18% of OD households) and were more prepared (or able) to pay for labour. For materials it shows very little difference in assistance from community or family between the two groups. ODF households also received financial assistance from family more frequently than OD households.

Table 28 – Source of Assistance with Materials/Labour by ODF Status and Village Type

Source	OD HH (# 290)		ODF HH (# 922)		Type 3 (#238)		Type 1 (#262)	
	Labour	Materials	Labour	Materials	Labour	Materials	Labour	Materials
Community	8%	3%	15%	2%	11%	0%	20%	5%
Family	10%	1%	21%	2%	13%	1%	25%	4%
Bought	2%	0%	7%	2%	5%	0%	8%	0%
Gathered	na	3%	Na	20%	na	21%	na	8%
None	79%	na	57%	na	71%	na	47%	na

A similar pattern can be seen between high and low ODF contexts. In Type 1 villages there was a lot more help with both labour and materials than in Type 3 villages.

INCONVENIENCE, DISCOMFORT (DM1)

Description of Factor:

Perceptions of inconvenience or lack of comfort associated with using a latrine; other negative perceptions of latrine use such as lack of privacy; or ease of OD.

Probing questions were:

- Did lack of comfort and convenience drive you to abandon your latrine and return to OD? Explain.
- Did the closeness of the bush make OD easier?
- Is it more comfortable to use the bush rather than a latrine? Explain
- Is it more private to use the bush than the latrine? Explain

Summary of Results/Analysis:

- Mentioned by 98 (14%) ODF households. Ranked in top 3 by M/F:46/67 (13%/12%) respectively
- The majority of comments mention the proximity and so convenience of using the bush for defecation.
- Poor quality and/or failing latrines were the cause of any discomfort expressed in the comments
- Responses were not strongly gendered
- It is unclear whether poor quality latrines cause people to revert to the bush, or the proximity of the bush lures people away from latrine use

For this factor, almost half of comments (46%) made reference to the proximity of ‘bushes’ or the ‘forest’

‘Availability of the forest near the household for them to defecate.’ – Jaribuni, Kenya

‘Since bush is around us it more convenient to use bush rather than toilet’ – Besase, Ethiopia

This suggests that for these households, the traditional practice of open defecation may have been more convenient or more comfortable (or at least for those in the household whose opinions were sought).

The word ‘comfort’ or ‘comfortable’ was only mentioned in 12% comments and most of these made reference to the poor condition of the latrine as the source of the discomfort

‘Latrine roof was leaking and thus not comfortable to use’ – Ndori, Kenya

‘I don’t have comfort when I want to shit because the pit has broken and also the wall has collapsed’ – Rogbai, Sierra Leone).

‘Collapsed’ pits or ‘broken’ latrines also appeared in a similar number of the comments.

This issue was consistently mentioned across the study. It was particularly strong in Jimma (Ethiopia) and was much stronger in Type 3 villages than either Types 1 or 2. The exception was Uganda, where it was very rarely nominated. This may indicate a variation in the way that enumerators in Uganda coded comments related to this factor.

Whilst it is generally thought that women find OD more inconvenient than men—and hence may have been more likely to nominate this factor—there does not appear to be a strong gendered

dimension to responses. Men rated it as most important more often than women but, as Figure 14 shows, overall both men and women in OD households rated this factor as important.

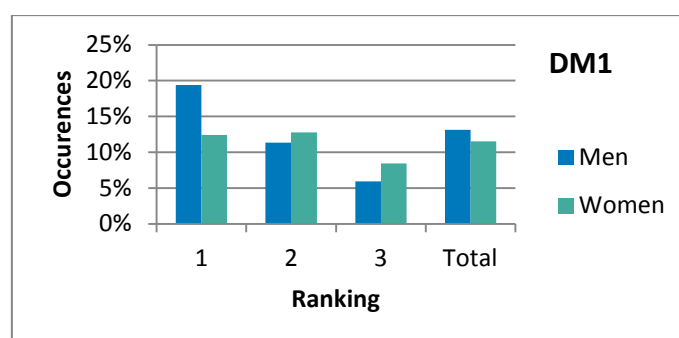


Figure 14 – Men's and Women's Factor Rankings for DM1

As noted above regarding the factor comments, convenience of the bush and poor quality of latrines were commonly mentioned. It is plausible that these two ideas work in tandem with the poor quality or condition of latrines rendering the (nearby) bush more convenient for defecation. If this is so, the causality of the relationship is not clear. It is possible that respondents were reporting *'my latrine fell apart and was not convenient so I abandoned it'* or *'ease of access to the bush was so convenient that I stopped maintaining and then using my toilet'*. If it is the former case, then it strongly relates to Factor DM5, maintenance and repair of latrines, which is presented in the next section.

MAINTENANCE, REPAIRS (DM5)

Description of Factor:

De-motivation caused by the effort and cost involved in carrying out ongoing maintenance and repairs, including rebuilding and/or emptying of pits.

Probing questions were:

- Did your latrine break down or did the pit fill up?
- Did you try to repair it? What sorts of repair?
- What prevented you from carrying out repairs?
- Is there a service for pit emptying available? How much does it cost?

Summary of Results/Analysis:

- Mentioned by 89 (13%) ODF households. Ranked in top 3 by M/F:45/66 (13%/11%) respectively
- From the timeline data, 32% of total households had carried out some repairs (41% of ODF households and 21% of OD households)
- Lack of money/funds was the most common aspect mentioned in the comments about this factor (61% of comments)
- Amongst all 52 villages included in Phase 2, subsidies were only provided in one village (in the form of materials), so there was no influence of subsidies on household perceptions.
- Households nominating this factor spent the same as other OD households on building their latrines.
- Households that never repaired their latrine are slightly over-represented
- This factor was more important for women than men, but not over-represented in female headed households

The bulk of the comments attributed to this factor (65%) refer to the difficulty and expense of 'maintenance' or 'repairs'

'The cost of repair and maintenance was very high.' – Jaribuni, Kenya

'It is difficult now to do repairs to the latrine because local materials are not available in the bush' – Rogbai, Sierra Leone

Clearly, for OD households, repairing the latrines was seen as a financial burden as well as a physical one, with repairs being 'costly' accounting for around 30% of the comments

'Constant repairs of the roof are very high and costly' – Katsemerini, Kenya

The factor comments also highlight the types of repair tasks that households faced. A fifth of comments mention termites, all in Uganda or Kenya

'The termites ate the grass and the poles' – Kajarau North, Uganda

Collapsing pits were mentioned in 16% of cases

'Pits keep on collapsing because of the poor ground conditions and the repair of collapsed latrine is costly. Termites also destroyed timber forcing the household to replace wooden parts which was costly.' – Kamsure, Kenya

Pits becoming full were also reported,

'Pit maintenance specially to make it empty when it full is difficult' – Deru, Ethiopia

Most of these comments, however, refer to pits filling up with water in the rainy season rather than becoming full from waste. Whilst 12% of comments mention general failure of latrines – as in:

'Repair and maintenance a heavy duty since when it collapsed he had no materials to repair it.' – Oria, Kenya

- there are very few specific references to other parts of the latrine than the pits. Problems with the roof were noted in 6% of cases and problems with walls, slab/floor or pan were not mentioned at all.

This factor was nominated consistently across the study, with the exception of Tororo. It was ranked in the top three slightly more often by women than men but there was no difference in the incidence of being the first ranked factor.

It was not clear from the analysis of the comments whether this factor was related to an excess of maintenance activities. Analysis of the latrine timeline data was carried out (refer to Table 6 for details) to determine if households that mentioned it had rebuilt their latrines—and hence whether it was the idea of repairing their latrines that prevented them attempting repairs, or whether the experience of having to repair latrines led them to abandon them.

Table 29 – OD Households nominating DM5 by Breakdown History and Country

Country	Total Factors			DM5		
	Total*	NR	R&A	Total*	NR	R&A
Ethiopia	330	61%	38%	31	68%	32%
Kenya	688	72%	26%	44	70%	27%
Sierra Leone	64	100%	0%	8	100%	0%
Uganda	320	93%	2%	6	83%	17%

*Refers to total number of comments rather than total number of households

Table 29 compares the number of factors mentioned by OD households and the proportions that did and did not attempt to repair their latrines before abandoning them (R&A and NR respectively). Data is presented as well for those OD households that mentioned factor DM5. Neither the NR nor R&A groups are over-represented amongst households that nominated DM5 suggesting that these households had an average experience of maintenance and repairs, being put off neither from carrying out any maintenance nor from having carried out too much.

SHARED WITH OTHERS (DM7)

Description of Factor:

De-motivation arising from sharing a latrine with another household.

Probing questions were:

- Did sharing the latrine with other HHs discourage you from maintaining your latrine? Explain.
- How many HHs?
- Who looked after the latrine? How was this responsibility shared?

Summary of Results/Analysis:

- Mentioned by 77 (12%) ODF households. Ranked in top 3 by M/F:22/53 (6%/9%) respectively
- Sharing often took place with family members or neighbours and this seemed to be a motivation for not building or repairing a household's own latrine rather than driving people to return to OD.
- Sharing of latrines appears to be more accepted in some locations than others (e.g. Uganda)
- In Sierra Leone, most people who share a latrine seem unhappy to do so and have returned to OD

Analysis of the comments for this factor identified that about a third (36%) related to sharing with family members

'They are presently sharing with their brother a latrine hence causing them to be slow in their latrine construction.' – Aputir Central, Uganda

Most of these comments came from Uganda. Only a few of these comments mentioned sharing with family to be a problem

'Sharing latrine with parents in-law, feels ashamed but she said she is not used to OD so she is forced to bear with the situation.' – Atiri D, Uganda

References to 'neighbours' latrines was made in a similar number of comments (37%), with the majority of these intimating that the presence of the neighbour's latrine meant they did not need to build or maintain their own

'They also said that they are shitting at the neighbours since his place is near and it is good to share.' – Kajarau North, Uganda

'The household is currently sharing latrines with their neighbours, this has since barred them from constructing their own latrine.' – Wagogo, Kenya

There was a contrasting response in Sierra Leone, where the few comments that were made all refer to not wanting to use the neighbour's latrine

'I don't want to use neighbour's latrine to avoid conflict or palaver; 'I feel more comfortable to shit in the bush than to use neighbours latrine' – Rogbai, Sierra Leone

Considering this factor across the study, the data shows that sharing as a de-motivator was particularly important in Tororo (22% of all de-motivating factors mentioned in OD households) but was not at all in either PU in Ethiopia, where it rated no mention. It was important to both women and men but overall was more frequently raised by women (Figure 15).

As illustrated by the different responses in Uganda and Sierra Leone, sharing latrines can act as a de-motivator for building latrines in one of two ways: either as '*I have access to a shared latrine, therefore I do not need my own*' or conversely '*I have to share a latrine which I do not like, therefore I will revert to OD*'. Whilst in the latter case, the household can clearly be classified as OD, it is less clear in the former situation. This highlights the definitional issue of whether or not a household that does not have a latrine but whose inhabitants use their neighbour's or family member's latrine (and so do not practice OD) could be considered ODF.

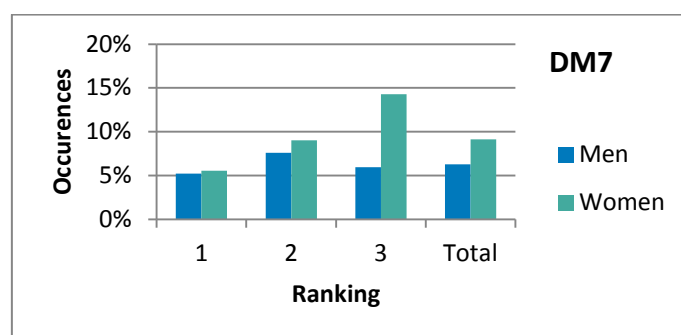


Figure 15 – Men's and Women's Factor Rankings of DM7

None of the four countries allowed for shared latrines in their ODF verification or certification criteria.²⁶ In practice, however, it was found that sharing latrines is not uncommon in some locations as shown in Table 30 which sets out shared latrine use by PUs, as recorded in the both re-verification and Phase 2 processes. A much higher proportion of households share latrines in Tororo, Port Loko and Homabay than in the other three PUs.

Table 30 – Numbers of Households that Use their Neighbour's Latrine

Country	Program Unit	Reverification Data			Phase 2 Data		
		# HHs	# using neighbour	%age	# HHs	# using neighbour	%age
Ethiopia	Jimma	802	21	3%	236	9	4%
	Shebedino	975	40	4%	241	8	3%
Kenya	Kilifi	392	9	2%	141	5	4%
	Homabay	422	56	13%	143	33	23%
Sierra Leone	PL / Moy'a*	509	94	18%	213	72	34%
Uganda	Tororo	1860	322	17%	238	106	45%
	Total	4960	542	11%	1212	233	19%

*Combined figures for Sierra Leone shown due to low numbers of villages

It should be noted that the higher percentage of sharing in Phase 2 is due to the purposive sampling of OD households to provide a better balance of ODF/OD households.

²⁶ FH Designs, 2012, Plan International ODF Sustainability Study Inception Workshop Report

4.4.2 BARRIERS

Of the de-facilitating factors, or barriers, that OD households identified as significant in their decisions to abandon their latrines, five factors each accounted for more than 10% of the factors mentioned:

- **Availability of Land, Materials, Labour (DF2)** 32% of total barrier count
- **Local Soil and Ground Conditions (DF1)** 25% of total barrier count
- **Technical Advice or Knowledge (DF5)** 13% of total barrier count
- **Availability of Water (DF3)** 13% of total barrier count
- **Quality of Initial Construction (DF4)** 11% of total barrier count

Each of these factors is discussed in the following sections.

AVAILABILITY OF LAND, MATERIALS, LABOUR (DF2)

Description of Factor:

Lack or limited availability of land, materials or labour making it difficult to maintain or rebuild latrines when required.

Probing questions were:

- What difficulties have you faced in getting the following to rebuild the latrine:
- Land?
- Materials – what materials? how acquired? What did they cost?
- Labour – who built? How much did it cost?
- Has lack of space prevented you from moving/ rebuilding your latrine? Explain.

Summary of Results/Analysis:

- Mentioned by 172 (32%) ODF households. Ranked in top 3 by M/F:44/148 (13%/28%) respectively
- This issue was more about materials and labour than land
- Lack of availability of free materials and labour appears to have resulted in households having to purchase these, which is a significant barrier. The results confirm that in some cases, the circumstances within individual households have changed
- This is clearly an issue of more importance to women than men

The comments made by households that nominated this factor indicate that access to materials and labour were the most significant barriers. Approximately 40% of the comments make reference to 'lack of materials':

'There is no money to buy materials for a permanent structure.' – Jaribuni, Kenya

'Materials like cement iron rods are not available as a result of lack of money' – Gbaneh, Sierra Leone

and a similar number make reference to a lack of 'labour' or 'help':

'We built and repair toilet on our own land, using family labour and wood from our bush' – Jewaro, Ethiopia;

'Household members not around to help me to reconstruct latrine' – Rogbai, Sierra Leone

References to 'land' or 'space' were much less prevalent (14%) indicating that whilst this was a barrier in some cases it was less commonly an issue:

‘The land she has is too small that is why she is relying on sharing because in case she is to dig a latrine now it will be in the compound.’ – Aputir Central, Uganda

About a quarter of comments about materials or labour make some reference to households willingness to pay for these items:

‘Materials like cement iron rods are not available as a result of lack of money’ – Gbaneh, Sierra Leone

The issue of perceived lack of funds was discussed above as a de-motivating factor (DM6) and the study takes the position that this represents a judgement on the part of OD households about how they prioritise their expenditure. It is clear, however, that for many households the lack of freely-available locally materials is a barrier to ongoing maintenance and rebuilding of latrines. Where this barrier exists, some households have no choice but to purchase these items. This is doubly significant, since in addition to being a barrier in itself, it represents the absence of one of the biggest motivating factors for continuing ODF status—the availability of free materials and labour, presented above in Section 4.4.1 (DM6).

It is of note that the ready availability of land, materials and labour was nominated by OD households as an important facilitating factor for building a latrine (cited by 63% of households). Given that many households listed the same factor as a cause for abandoning their latrine, the question arises whether this represented a change in what was available to individual households (indicating a change in the household context) or whether the comments were made from different groups of households with different types of experience. To test this, cases were identified where individual households nominated this factor as a positive for initial construction and as a cause for reverting to OD. A total of 86 households fell into this category and their paired comments were examined. In many instances this showed that there had been a change in the context with resources that had once been freely available no longer being so. For example:

*Initial: ‘The tools for digging the pit were easily available i.e. could borrow from neighbours.’
Current: ‘They also lack digging tools like jembes and shovel’- Jaribuni, Kenya*

*Initial: ‘Her sons provided labour under assistance of the late husband’
Current: ‘Old and has no income generation activity and depends on support from son who rarely comes home.’ – Ndori, Kenya*

*Initial: ‘Availability of materials e.g. logs and makuti, own labour i.e. she built the latrine by herself.’
Current: ‘Lack of funds to buy materials e.g. logs, fito, makuti. Unavailability of local materials like makuti and grass. She has no one to build for her the latrine.’ – Katsemerini, Kenya.*

In other cases, a different issue arises between building and abandoning their latrines:

*Initial: ‘They had enough land to build the latrine.’
Current: ‘They did not have funds to hire a constructor. They lacked materials to construct a latrine. Availability of a bush to defecate made them go back to OD.’ – Jaribuni, Kenya*

Initial: 'The land is free and it belong to my family members, labour is also free because my wife and children helps in the building of latrine'

Current: Materials like cement iron rods are not available as a result of lack of money' – Gbaneh, Sierra Leone

Many of the comments make reference to 'she' or 'her' and this factor was more significant for women than men (Figure 16)—both overall and as a first-ranked barrier. This indicates that there is likely to be a gender dimension to this barrier.

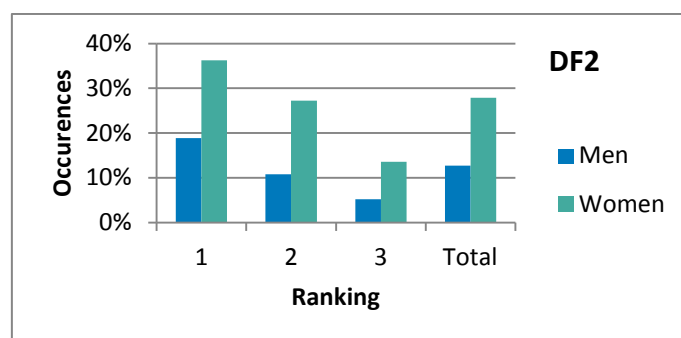


Figure 16 – Men's and Women's Ranking for DF2

LOCAL SOIL AND GROUND CONDITIONS (DF1)

Description of Factor:

Aspects of the local ground conditions that either made building a latrine difficult (e.g. rocky soil) or prone to collapsing (e.g. soft soils or areas prone to flooding).

Probing questions were:

- Describe the ground conditions which made rebuilding the latrine difficult?
- sandy soil - making the pit collapse?
- rocky – making it difficult to dig?
- high water table – making the pit collapse?
- area prone to flooding?
- How have these conditions discouraged you from rebuilding?

Summary of Results/Analysis:

- Mentioned by 138 (25%) ODF households. Ranked in top 3 by M/F:34/121 (10%/23%) respectively
- Soft soils that collapsed easily were a major problem for OD households.
- Initial perceptions about the benefits of soft soils being easy to dig gave way to concerns about them collapsing too readily.
- Women were much more likely than men to nominate and prioritise this factor.
- Analysis of soil types from the household surveys showed that OD households were more likely than ODF households to experience soft, easy to dig soils and rocky soils that were hard to dig; and less likely to experience hard, self-supporting soils.
- Collapsing soils were identified equally amongst OD and ODF households, suggesting that the response to collapsing soils is an attitudinal issue.
- OD households were more likely than ODF households to experience flood-prone soil or have pits affected by high water tables—issues that are not easily dealt with by households using locally available materials.

Similar to DF2 above, this factor rated highly as both a facilitator for building latrines initially and as a barrier that influenced household decisions to abandon their latrine. The majority of the comments under this factor relate to the type of ground (hard/soft/rocky etc.) and the relative ease or difficulty

with which pits can be dug. When operating as a facilitator for initially building latrines the majority of comments (63%) referred to the ground being 'soft' and 'easy' to dig:

'It is easy to dig and repair pit, local soil is soft' – Mensuri, Ethiopia

Conversely, when operating as a barrier to sustained latrine use, soft soils are defined as easily collapsing:

'Soil, ground is collapsing during wet season' – Jewaro, Ethiopia

'She said that despite having a little land the soils are weak to hold the slab and usually collapses when there is too much rain.' – Aputir Central, Uganda

There was also frequent mention of both 'hard' or 'rocky' soils which are difficult to dig:

'The soil ground was hard and it was dry season, hence the wife lost hope.' – Ndori, Kenya

Thirty households recorded both positive and negative comments against this factor. As with DF2 (above), comments made by these households were analysed in pairs. In the majority of cases, the comments initially state that the soil is 'soft' or 'sandy' making it easy to dig a pit but describe the pit subsequently collapsing in the wet season:

Initial: 'Soil was not difficult to dig our compound is good site to dig latrine'

Current: 'The ground in my compound is water logged and this has discouraged me to rebuild my latrine' – Rogbai, Sierra Leone.

Initial: 'Had his own piece of land and since it was a light sandy soil, he dug 12ft pit.'

Current: 'The soil where latrine was built is weak and collapses easily due to rains, and this has demoralized them.' – Oria, Kenya.

Similarly, in some cases where the ground is 'rocky' or 'hard' this was initially seen as an advantage as the ground is self-supporting but then becomes a burden when a new pit needs to be dug:

Initial: 'The ground condition was rocky making the structure self-supportive and durable.'

Current: 'This area is rocky therefore making pit digging too difficult not unless you hire local artisan to do it for you.' – Kamsure, Kenya.

Words such as 'demoralised', 'lost hope' and 'discouraged' which appear in the comments point to a sense of defeat—where the early enthusiasm has been eroded to the point where efforts to maintain a latrine are abandoned and improved sanitation behaviour is no longer sustained.

There also appears to be a strongly gendered element to this factor, with women in OD households nominating it significantly more frequently than men (see Figure 17). Despite this, it was not over-represented amongst female-headed households.

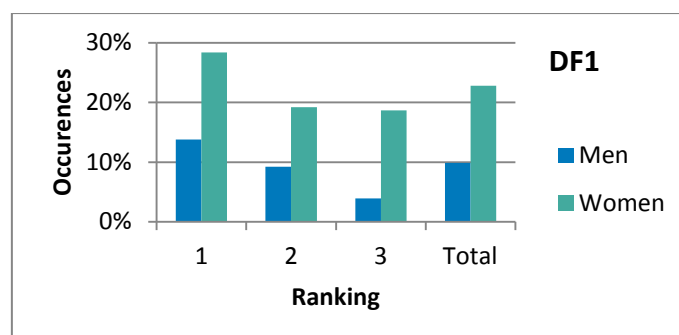


Figure 17 – Men's and Women's Ranking of DF1

It is possible that all household—OD and ODF—experienced similar soil conditions and that what governed the outcome was the attitude to responding to these conditions. During the survey, households were asked to identify what type of soil their latrine was constructed in. This information was used to investigate whether OD households were dealing with more problematic soil conditions than OD households or whether their responses were likely to be attitudinal, as intimated in Section 4.3.2 (F1) above. As can be seen in Table 31, OD households were more likely to experience soft soils which are easy to dig initially but prone to collapse and rocky ground in which pits are hard to dig. ODF households, however, are much more likely than OD households to enjoy the benefits of 'hard' soils which are self-supporting and so both avoid collapse and minimise the effort and expense of lining pits.

Table 31 – Soil Type vs. ODF Status

Soil Type	OD	ODF
Soft	46%	34%
Hard	8%	21%
Rocky	21%	16%
Mixed	26%	29%

This factor was further probed in an additional survey question where households were asked to report on any problems that had affected their latrine pit. Table 32 shows the findings both for the entire Phase 2 sample and for those households that raised local soil conditions as an enabler (F1) or barrier (DF1).

Table 32 – Ground Related Problems experienced by ODF and OD households

	ODF	OD	ODF (F1)	OD (DF1)
# of HHs	922	290	614	246
Collapsing soil	15%	17%	17%	15%
High water table	6%	8%	5%	11%
Prone to flooding	3%	7%	1%	8%

These results show that incidences of collapsing soils were equally common in OD and ODF households. ODF households—who had overcome the issue to continue use of their latrines—had dealt with this issue more effectively suggesting that collapsing soils is an attitudinal concern (or demotivator) rather than a barrier. The results also show, however, that OD HHs (particularly those nominating ground conditions as a factor) experienced a greater incidence of high water table and flooding issues than ODF households. These problems are likely to be much more difficult to deal with at the household level than soft soils and represent a significant barrier to remaining ODF. This

finding may also be indicative of OD households being located in lower lying or more vulnerable areas and hence be related to poverty or marginalisation—an area worthy of further investigation.

TECHNICAL ADVICE OR KNOWLEDGE (DF5)

Description of Factor:

A lack of technical advice or expert knowledge about how to build or maintain good quality, durable infrastructure.

Probing questions were:

- Who advised you on how to build your latrine? Someone from in the village or outside the village?
- What advice did you receive?
- Have you been able to access this advice for rebuilding your latrine? If not, explain.

Summary of Results/Analysis:

- Mentioned by 72 (13%) ODF households. Ranked in top 3 by M/F:32/56 (9%/11%) respectively
- Access to advice had been an important factor in facilitating households to initially build their latrines.
- After ODF status had been achieved, many OD households felt that there was an absence of technical advice or knowledge that they could access.
- Whilst there was some follow up by Plan and local/government agencies, more information is required about to what extent these visits contributed technical advice

The dominant theme for this barrier was ‘advice’. About half of the comments (51%) make reference to not being able to access the advice needed to build or maintain latrines:

‘I don’t have someone to advise me...I have no access to any advice any more’ – Gbaneh, Sierra Leone)

This was a contrast to the situation when latrines were first being built. As with ODF households (Section 4.3.2 – F5), OD households reported that good access to technical advice was one of the most important facilitating factors for initially building a latrine (nominated by 14% of OD households). A range of technical experts were mentioned including Plan, community health workers, CLTS committee members and local artisans:

‘the PLAN people advised them on how to dig and construct not less than 6ft and preferably round pit so that the slab can be strong’ – Katsemerini, Kenya

‘Health workers gave us technical advice how to construct and use our latrine’ – Odoro, Ethiopia

‘They got technical advice from a local artisan.’ – Jaribuni, Kenya.

Several also make mention of their own knowledge:

‘Husband also had basic knowledge on constructing a simple latrine.’ – Manera, Kenya

This contrast between good access to technical advice or expertise initially and a subsequent lack of it later on is further highlighted by looking at comments from individual households that mentioned this factor initially as a facilitator for becoming ODF and then as a barrier to remaining so:

Initial: ‘Technical advice from VHC on how to build latrines’

Current: ‘We don’t have knowhow on how to repair and maintain the latrine’ – Katsemerini, Kenya

Initial: 'Availability of technical advice from the local artisan.'

Current: 'Lack of technical advice from CHWs on how to maintain my latrine and prevent termite invasion.' - Umoja Ni Nguvu, Kenya

Consistent with findings for ODF households, there was a similar response to this factor amongst women and men, suggesting that there was not a strong gendered dimension to technical advice or knowledge. Men were slightly more likely to rank it as one of the two highest priorities and women much more likely to include it as a mid-ranked barrier (Figure 18).

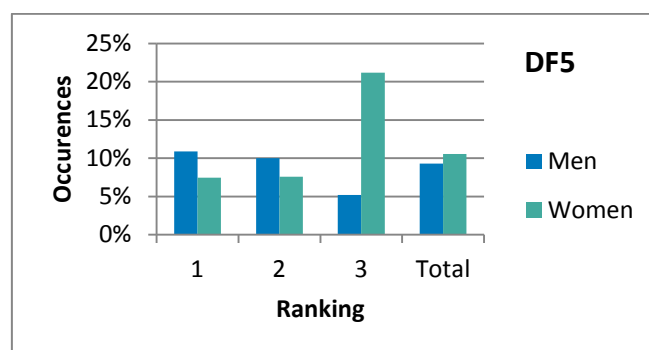


Figure 18 – Men's and Women's Ranking of DF5

Visits by External Agencies or Organisations

Consultations with village leaders included collection of information about follow up visits to each village by external agencies (by Plan and local or national level government) as well as some detail on the nature of the visit. For the three village types, Table 33 shows the proportion where at least one visit had been provided.

Table 33 – Visits by External Agencies by Village Type

Village Type	Plan	LG	NG
1	88%	44%	31%
2	86%	64%	23%
3	91%	64%	27%

As can be seen, nearly all villages received some form of follow up visits, most commonly by Plan. To relate this to DF5, Technical advice or knowledge, more information is required about the nature or purpose of the visits. Such information, however, was only recorded in some PUs (Homabay, Port Loko and Tororo) and is mostly quite general in nature:

'Plan staff came to check on latrine status' – Gbanguma, Sierra Leone;

'[Local government staff] moved together with plan staff and VHTs' – Akworot A, Uganda

Some of the comments clearly indicate the purpose of the visit was simply to verify or police, which would not have contributed to the technical advice received by households:

'Plan staff and DHO came and verified.' – Aputir West, Uganda

'To monitor latrine construction and usage and arrest those without latrines' – Ndori, Kenya

More information on the number and types of follow up support that communities received would be useful and this topic is recommended as an area for future investigation.

AVAILABILITY OF WATER (DF3)

Description of Factor:

Lack of water or difficulty in accessing water making the construction, repair and cleaning of latrines difficult.

Probing questions were:

- Explain how lack of water has blocked you from rebuilding the latrine.
- What is the problem in accessing enough water?

Summary of Results/Analysis:

- Mentioned by 74 (13%) ODF households. Ranked in top 3 by M/F:31/61 (9%/11%) respectively
- Since there were no pour-flush latrines in the study area, this barrier was not related to use of the latrines.
- Most comments about this factor were of a general nature about water scarcity; only a few related to water scarcity making it more difficult to repair or clean latrines.
- It is possible that this factor relates mostly to the use of water during construction but no strong indications were revealed about how water scarcity acted as a barrier to sustaining ODF status.

Access to water has been covered in some detail in Section 4.3.2 (F3) above, where it was nominated as an enabling factor that assisted some households to remain ODF. As noted in Section 4.3.2 (F3), there were virtually no pour flush latrines identified anywhere in the study and so any references to water as a barrier only relate to problems experienced during construction, maintenance or cleaning of latrines—not their use.

No single issue stands out amongst the comments made by the households nominating water as a barrier. Most comments simply make reference to *water not being available*

‘There was no water for constructing the walls’ – Jaribuni, Kenya

Distance to water sources (indicated by references to how ‘far’ away the source is, or the distance required to ‘fetch’ water) accounts for 28% of the comments:

‘Water is hard to get since it is far from the homestead.’ – Umoja Ni Nguvu, Kenya; ‘Said being a bachelor he had nobody to help him fetch the water.’ – Aputir Central, Uganda

Reference is made to the *cost of water* in 13% of the comments

‘The water is being sold at the water point and its expensive for this family to afford’ – Katsemerini, Kenya

Virtually no mention is made of the *difficulty of repairing* the latrine due to lack of water, and only a few comments refer to the *difficulty of cleaning* the latrine

‘Since we have not supply of water it is too difficult to clean toilet regularly’ – Egu, Ethiopia

This suggests that the major problem associated with water availability occurs during construction activities. Given the high incidence of general comments about a lack of water it is also possible, however, that this was simply an issue at the forefront of households minds rather than a barrier closely related to households abandoning their latrines. Consequently, further exploration of this issue is warranted.

Interestingly, whereas there was not much difference between the way women and men in ODF households prioritised availability of water as an enabler, for OD households men were much more likely than women to rate this as their most important barrier (Figure 19). Overall, however, women appeared as likely as men to mention this factor.

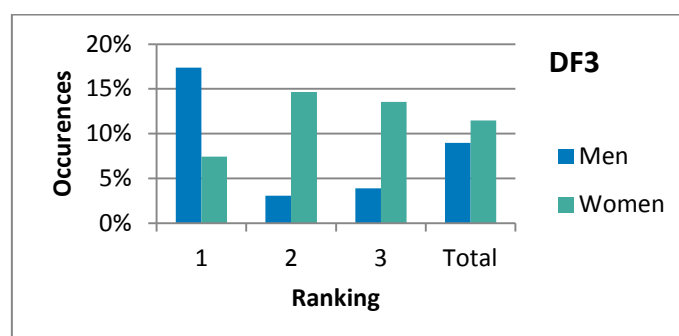


Figure 19 – Men's and Women's Ranking of DF3

It would be expected that if availability of water was a significant factor influencing household decisions about latrine maintenance and repair, that those households nominating this factor would have worse access to water than those that did not nominate it. Dry season water collection times were collected during the surveys, and Table 34 shows the average times for water collection for OD households both nominating and not nominating this factor. It can be seen that contrary to this supposition, in fact households nominating this factor had better access to water.

Table 34 – Dry Season Water Collection Times vs. DF3

Water Collection Time	HHs Nominating DF3	HHs not nominating DF3
30 minutes or less	52%	56%
31 to 60 minutes	34%	19%
1 hour to 3 hours	8%	23%
More than 3 hours	5%	2%

This tends to indicate that availability of water is probably not the prime reason why these households have abandoned their latrines, despite it being ranked number one by men in around 17% of households.

QUALITY OF INITIAL CONSTRUCTION (DF4)

Description of Factor:

Poor quality construction of latrines initially acting as a barrier to the long-term maintenance and use of those latrines.

Probing questions were:

- Was the quality of the latrine you built good, fair or poor?
- If the quality was poor, how has this affected people's use and maintenance of the latrine?
- Why was the construction quality good or bad; who constructed it?

Summary of Results/Analysis:

- Mentioned by 63 (11%) ODF households. Ranked in top 3 by M/F:39/48 (11%/9%) respectively
- This factor was most commonly mentioned in Kenya and Ethiopia
- Four different types of quality issues were noted in the comments:
→poor quality materials

- the cost of building to a good standard initially
- lack of knowledge about how to build to a good standard
- pressure to build latrines quickly

The final de-facilitating factor which was mentioned in more than 10% of OD households was the quality of the initial construction of the latrine. Most of these were from Kenya and Ethiopia (representing 46% and 41% of comments respectively) with the other two countries only accounting for 13% of the comments between them.

In addition to merely mentioning the quality of the latrine, for example:

‘Quality of initial construction was poor so she needs to build another one.’ – Umoja Ni Nguvu, Kenya

the comments reveal four different reasons as to why the quality of their latrines was poor.²⁷ It is noted that there is significant overlap between these and some of the other factors discussed in the previous sections.

- *Quality of materials*, leading to weak structures, as in

‘I use sticks and mud to construct my first latrine, the initial construction materials made my latrine to got collapsed’ – Gbaneh, Sierra Leone

‘Initial construction used was poor since he re-used old mabati and off-cuts. The roof was leaking in rainy season and this contributed to slab collapsing’ – Ndori, Kenya

- The cost of hiring help or building to a good standard, as in

‘They cannot afford to hire a local artisan’ – Jaribuni, Kenya;

‘The quality of the initial construction was compromising hence costly in maintaining’ – Ndori, Kenya’

- The *lack of knowledge* of how to build a good quality latrine at the outset, as in

‘Lacked knowledge on how to reconstruct latrine that could last for longer time.’ – Oria, Kenya

- *Pressure to build* or having built quickly was mentioned in a number of the comments in Kenya, pointing to particular issues about the way CLTS was implemented in those locations:

‘Quality of initial construction was poor since we constructed the latrine in hurry before celebration.’ – Umoja Ni Nguvu, Kenya

‘The quality of the initial construction wasn't good. We had to construct a latrine because of the pressure by the CLTS leaders’ – Ndori, Kenya

²⁷ The numbers of comments recorded was low and so actual proportions are not given.

Men nominated this factor slightly more frequently than women and were much more likely to rank it as the most important barrier (Figure 20). This may reflect men being more actively involved in or responsible for latrine construction.

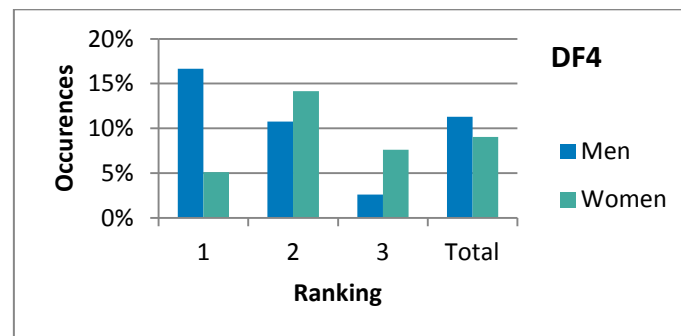


Figure 20 – Men's and Women's Ranking of DF4



Local Latrine, Shebedino, Ethiopia

COUNTRY-SPECIFIC ISSUES

The results of the analysis described in Section 4 were shared with the four country offices that participated in the study. Local variations that were observed in the data were also shared and representatives from each country were invited to attend a two-day workshop in Addis Ababa in October 2013 to discuss the overall results, as well as the issues pertaining to their country, and reach consensus as to what the implications of study might be for Plan's CLTS programming. The outcomes and conclusions of the workshop are documented in the workshop report,²⁸ and have been used to inform and enhance the interpretation of the results. The main findings from the workshop are presented below. It is important to note that these observations and conclusions are not necessarily supported by the study data set or analysis but are included here both to highlight the issues and variations and to offer some insight into why they might exist.

5.1 ETHIOPIA

Hand washing in the Ethiopian CLTS program is considered to be integrated which is reflected in the nationally adopted variant to CLTS, known as CLTSH – or CLTS plus Hygiene. The presence of hand washing facilities near latrines is one of the criteria used to verify whether a household can be classified as ODF, although the CLTSH verification guidelines actually define two levels of ODF criteria. At the first level, households need only to have ended OD as indicated by the presence of a functioning latrine. Hand washing facilities and other indicators of improved hygiene behaviour such as ensuring pit latrines have lids only come in at the second verification level.

The reason postulated by the Ethiopia team as to why there were relatively low levels of hand washing facilities observed during the study was that in fact promotion of hand washing does (or did) not come in to the triggering process, which has adopted Kamal Kar's recommendation of only having a single message during triggering (ending OD). The point was also made that there is currently no ignition technique for hand washing as there is for ending OD but they have been trialling techniques such as the 'bread' exercise²⁹ to encourage hand washing.

In Jimma, where hand washing facilities were very scarce, the reason given was that it is a predominately Muslim area and 'Muslims take water containers with them when they go to wash following defecation' which negates the need for hand washing facilities.³⁰ This was also given as a part explanation for the fact that **Location too far or hard to reach (DM2)** was commonly mentioned in Jimma – for religious reasons people make their latrines a long way from their houses – in the coffee plantations – in order to have privacy for washing after defecation (and to reduce smell).

Also in Jimma, the high number of nominations of **Sanitation and Hygiene Promotion Campaigns (M12)** as a motivation for remaining ODF was attributed to communities in this PU (mis)interpreting CLTS triggering and other related activities as hygiene campaigns.

²⁸ Internal Plan report, available on request.

²⁹ Using the same hand that has touched faeces to handle and offer bread to community members

³⁰ The issue of cultural practices around hand washing and washing generally came up in a number of discussions, with the point being made that hand washing facilities near latrines does not necessarily reflect hand washing practices. Various opinions were put forth but no clear consensus reached by the group.

Follow up and support provided to communities in the study PUs consists of community-level task forces which visit and report on ODF status of households, visits by supervisors, health extension workers, Plan field staff etc., as well as the weekly monitoring process by students and teachers established by Plan. Interestingly, the high number of households in Shebedino that built latrines between the two phases of the study was attributed to a visit to the area by a high profile natural leader, whose presence ‘shamed’ OD households into re-building rapidly.

Related to this is the influence of the massive scale-up of Ethiopia’s CLTS program generally.³¹ The Ethiopian Government has put in place an ambitious target to ensure the entire country is ODF by 2015 and Plan Ethiopia is playing an integral part in this process. Shebedino is one of the first Woredas to be declared ODF – a milestone that was achieved during the study period – and so it is likely that this also exerted some pressure onto households that had slipped back to OD to rebuild their latrines. The implications for the quality of CLTS at the household and village level of the rapid scaling up was discussed by the Plan Ethiopia team but no clear consensus about this was reached. However, the high number of mentions of **Force (bylaws, penalties, & threats) (M9)** in Shebedino could be an indication of this pressure, although it was also noted that in Shebedino communities and natural leaders have had bylaws and fines in place for open defecators from the very beginning.

Credit schemes have not been used in Plan Ethiopia’s CLTS programming to date, although they have recently made a start with sanitation marketing. Shared latrines generally are not recommended or encouraged in Ethiopia.

5.2 KENYA

Strong village leadership was put forward by the Kenya team as a critical ingredient in household ODF status. Where village leadership is strong and motivated, households are the subject of constant internal monitoring and have a tendency to maintain their ODF status. Where the opposite is true, a greater proportion of households tend to slip back to OD. In Kilifi there was a negative correlation between attendance at triggering and household ODF status (less people attended triggering in better performing villages). The Kenya team suggested that those villages triggered by Plan and the Government may not have had high levels of motivation and strong leadership and so, although a high number of people may have attended triggering due to the external influence of Plan/Government, without the ongoing internal pressure and follow-up by the village leadership, many households regressed.

The team pointed out that in Kenya there has been high levels of spreading of CLTS from triggered communities to neighbouring communities. Where village leadership has been strong, they have watched neighbouring triggered communities become ODF and have decided to follow suit. Households in these communities do not necessarily consider themselves as having been triggered but tend to maintain their ODF status due to the strong leadership. As a result, when surveyed, this group may have skewed the results to create the anomaly noted in the study data set. This information was only put forward at the workshop and not during the study period or village

³¹ Refer to the Plan Pan African CLTS Program mid-term review, finalised in March 2013, which reported impressive results in Ethiopia compared with the other 7 countries in the program.

selection process, and it is not known which villages, if any, actually were self triggered in the way described. It would be interesting to explore the issue of self-triggered communities further.

Leadership was also cited as the probable reason for the high number of times the factor **Follow up visits, advice, external support (M11)** was mentioned; where village elders and chiefs have been trained as CLTS facilitators this has kept up the pressure on and support to households to attain and maintain their ODF status. Support from the Government Public Health Officer was also mentioned, although the observation was made that the level of support offered by these people very much depended on their individual motivation and ‘passion’ for CLTS.

Less clear was why **Peer pressure, being like other (DM10)** rated highly in Kilifi as a de-motivator (i.e. people returned to OD because they wanted to be like other open defecators). The only reason put forward for this was human nature: when surrounded by people doing something – even if it is considered negative – people will often feel justified in following suit.

The Kenya team considered why in Homabay **Force (by laws and penalties, threats) (M9)** was mentioned as a significant motivating factor for building latrines and remaining ODF. In 2010 a series of acts designed to promote latrine use were brought into being – the Chief’s Act and the Public Health Act – which were designed to empower local leaders to force households to comply. This may well have forced some households to build latrines. However, whether they are used is less certain with some householders branding their latrines as ‘the chief’s or health worker’s latrine’. What has been considered more effective has been community led by-laws and rules put in place to ensure everyone has and uses a latrine. Examples of the pressure that is brought to bear on people who do not maintain latrines include refusing to allow them to hold significant events such as weddings and funerals until they have built a latrine.

Sanitation and hygiene promotion campaigns (M12) featured strongly in both PUs in Kenya, mainly because of strong sanitation and hygiene promotion campaigns led by the Government and supported by various agencies/NGOs. In both PUs (and the country generally) the Ministry of Health has been promoting sanitation and hygiene through a community strategy where Community Health Workers provide hygiene promotion messages/information along with other health messages. Examples of these messages included hand washing, dish racks, household waste management, importance of latrine use, nutrition and so on.

The Kenya team queried the study findings that, unlike the other three countries, ODF status did not correlate with knowledge of hand washing in Kenya. They stated that in Kenya, hand washing messaging focuses on four critical times (as opposed to the nine used in the study questionnaire), which, due to the way the study analysis scored knowledge of hand washing, meant that the Kenya scores would be artificially low compared to the other countries. However they also stated that most likely hand washing after latrine use is the most prominently mentioned time.

5.3 SIERRA LEONE

An interesting observation was put forward by the Sierra Leone team as to why there was a large decline in the numbers of OD households between the two phases (100% in Moyamba). As with the other countries, pits collapsing during rains is common, however in Sierra Leone this appears to be an accepted cycle. Phase 1 of the study (re-verification) was conducted in May which is the dry

season, but too early for households to have re-built. By Phase 2 (which was conducted in the rainy season), many of these households had constructed their latrines again and hence the low numbers of OD households observed at this stage. However they also acknowledged that the re-verification phase itself may have also acted as a motivator for these OD households. Additionally, the reason put forward by the Sierra Leone team as to why women said they abandoned their latrines for health reasons was that they understood the dangers of OD near their houses and so when their latrines collapsed they went far away to practice OD to keep excreta well away.

The reason put forward by the Sierra Leone team as to why **Force (by laws & penalties, threats) (M9)** was commonly mentioned there was simply the practice of communities establishing these by-laws as part of their action plans for becoming ODF. However, it emerged during the discussions that in Sierra Leone sharing of latrines is much more common than in other countries. In many villages, extended families live in compounds with potentially four or five families sharing a single latrine. These families may live in separate dwellings or share a large house but are considered separate as per the definition of a family in Sierra Leone being ‘everyone who eats from the same pot’. Generally there is a lead or head household within the compound who is ultimately responsible for decisions within the compound and it is likely that this person yields a certain amount of power over others. It is possible that this authority is what is being referred to when the factor was mentioned.

Hand washing was a contentious topic of discussion during the Sierra Leone presentation. The team said that in Sierra Leone, everyone has a ‘kettle’³² which is carried to the latrine for washing but normally stays in the house in order to ensure it does not get stolen. The statement was made that as hand washing is required at other times than just after using the latrine having the hand washing facilities near the latrine will discourage hand washing at other times. In addition they said households feel the water in the kettles will become contaminated if left at the latrines. These are the likely explanations for the low numbers of hand washing facilities observed in the Sierra Leone data. Interestingly, the ODF criteria described the need for hand washing facilities at the latrine or easily accessible from it – but a definition of what is considered easily accessible was not provided. How this works with multiple families accessing a single latrine is not known and is an area for further investigation.

Promotion of hand washing is done via radio and other forms of media, as well as through the formation of school and village health clubs. IEC materials are also made available. During ODF certification households are provided with kettles and some soap as a one off incentive (subsidy), and also told that ash can be used in the absence of soap. During the process of becoming ODF, follow-up is provided by both Plan staff and local Government staff who make regular and routine visits to villages. It seems that on attainment of ODF status a number of other incentives are also provided to villages including water points and bicycles to natural leaders. Other forms of support include training to water committees (unclear whether these are also responsible for sanitation) and training in village savings and loans schemes linked to WASH outcomes.

³² The term used in Sierra Leone to describe a water container

5.4 UGANDA

Unlike the other countries, in Uganda they stated that hand washing promotion starts with triggering and continues right through the whole CLTS process. It is integrated into all community dialogues and runs alongside the Government health and hygiene campaigns. The team described a hand washing campaign specifically targeting breast feeding mothers and school children, demonstrations at the village level on how to build and use hand washing facilities and provision of training of trainers to masons and village health workers in various aspects of hygiene. Drama groups are also formed at every village too to promote hygiene.

The use of masons (referred to in the workshop as SanMark or sanitation marketing) seems to feature strongly in Uganda. In addition to the ToT training mentioned above, masons also have received training in disaster risk reduction (DRR) in the form of technical knowledge on how to build flood resistant latrines (pits) and latrine location. Further strengthening of this group is done by forming masons associations into village savings and loans associations, although this is still at the piloting phase. These apparently play a big role at the village level in terms of ensuring the whole village is ODF, by adjusting the amount they charge households for assistance based on their relative wealth.

It would seem that technical assistance is important in Tororo as there are two rainy seasons that villagers have to contend with – March to May and August to November. Despite the Uganda team's assertion that follow up and monitoring continues throughout the rainy season, it is likely that access is impaired and the team thought that the high numbers of households whose latrines had collapsed between phases of the study was due to the rains. Indeed, both data collection phases coincided with the rainy seasons which was perhaps unfortunate. Another factor which may have influenced households during the study period was an outbreak of cholera in Tororo. In villages where they had maintained their ODF status, the team said there were low levels of (or no) cholera.

Follow up, support and monitoring is done on a monthly basis by natural leaders who provide reports to sub-county health inspectors. Monitoring reports are provided to the Ministry of Health and Plan gets copies for those villages in which they work (as Plan is implementing the Government approach).

The issue of water supply and access to water was discussed by the Uganda team at some length. As described, provision of water supplies in Uganda seems to be linked to attainment of ODF status, which does not explain the (generally) better access to water in villages with apparently no water supply. It is likely that this is simply an anomalous result due to poor data, although in Uganda mention was made of another initiative which takes a holistic approach to WASH, ensuring that water stressed villages do receive a water supply. This is an area that requires further investigation.

No real explanation was offered for the infrequent mention of the factor **Disgust, Shame, Pride (M6)** in Uganda. The team did describe, however, the same phenomena mentioned by the Kenya team, namely motivated neighbouring villages taking it upon themselves to become ODF without an external triggering exercise.

The high incidences of **Improving Things for the Whole Family (M8)** in Tororo was simply put down to low levels of probing by the enumerators – and that had they pushed a little deeper other factors would have emerged.

IMPLICATIONS FOR PRACTICE & FURTHER WORK

This section sets out the principle conclusions in the form of implications for practice with respect to improving the sustainability of Plan's CLTS programs. The authors acknowledge that these conclusions are not definitive, noting the limitations discussed in Section 3.3, and are presented here to guide and inform the thinking of Plan's CLTS practitioners, and possibly form the basis for future investigations.

Whilst the implications presented below are primarily for Plan's purposes, it is important to recognise that any programmatic intervention must be scrutinised from the perspective of scale – whether or not the recommendation can be taken to scale either naturally or through national level government processes and programs. For example, a recommendation that Plan staff should visit communities to deliver a critical aspect of CLTS is unhelpful if it cannot also be done by natural leaders, or government frontline staff as part of a national program. Many of the recommendations below are of a general nature, and so do not go to the level of detail of specifying exactly how they should be implemented, but where there is specificity it has been examined through this lens.

There are essentially two categories of conclusions and recommendations coming from the study. On one hand the study identified a series of factors that have acted as barriers and de-motivated households, thus contributing to their decisions to abandon their latrines and revert to OD. Efforts to address these will assist with bringing this group back to ODF status and prevent households reverting to OD in the future.

On the other hand, there are those factors that have motivated or enabled households to maintain their latrines, either through initial levels of investment in a latrine that has lasted, or circumstances – both internal or external – that have led to them being prepared or able to invest in repairs and rebuilding. Building on or enhancing these factors is likely to strengthen this resolve and increase the likelihood that these households continue to maintain their latrines into the future and possibly even improve them.

Additionally, the study has identified some areas of weakness in the CLTS programs, particularly around improved hygiene behaviour such as hand washing. Addressing these weaknesses will contribute to household's achieving complete ODF status which is the ultimate aim of Plan's CLTS programs.

Six areas of focus have emerged from this process, as detailed in the following sections.

6.1 HAND WASHING

The results of re-verification show that whilst Plan has been quite successful at getting households to build latrines and also – in most locations (87%) – to retain them, it has been less successful at the sustained behaviour change associated with maintaining hand washing facilities and consistently using a lid on latrines. In at least 8% of households (and over 30% in some locations) that have maintained their latrines, some household members still practice OD around the house.

Of the four most commonly mentioned factors motivating ODF households to maintain their latrines, only Health (discussed in the next section) potentially encompasses hand washing and other improved hygiene behaviours. The other three – Shame/Disgust/Pride, Privacy/Security and

Convenience/Comfort – are all met by simply having a latrine which perhaps goes some way to explaining the disparity between the figures for latrine retention and hand washing facilities. Additionally, in several locations, the study found indications of external coercion – pushing households to build hand washing facilities in order to satisfy ODF verification criteria in time to meet deadlines such as ODF celebrations.

All four country programs stated that they promote hand washing alongside their CLTS programs, however the quality of this promotion is not known. The timing of when it is introduced also varies and may have a bearing on its effectiveness. In Uganda, for example, hand washing promotion begins during triggering and continues right through the process (alongside government run health and hygiene campaigns) whereas in the other countries it does not begin until after triggering, in line with the standard CLTS approach which emphasises a single key message – ending OD – during triggering. In Ethiopia they have integrated hand washing into CLTS to create the local variant CLTSH (CLTS plus Hygiene). However, whilst the presence of hand washing facilities near latrines is one of the criteria used to verify whether a household can be classified as ODF, the CLTSH verification guidelines describe a two stage verification process. At the first stage, households need only to have ended OD as indicated by the presence of a functioning latrine, with the other criteria – such as hand washing facilities – only coming in at a later, second stage. ODF certification happens at the Woreda (district) level in Ethiopia which is likely to mean pressure is brought to bear on straggling households and villages to comply in time for these large events.

Other local cultural or behaviour factors may also influence household decision making around hand washing facilities. In Sierra Leone, for instance, sharing of a single latrine between several family groups who all live within a single house or compound is apparently common. According to the Plan Sierra Leone team, in these circumstances hand washing facilities (normally a kettle) are owned by each family group, who do not leave them at the latrine for fear of theft, and also due to the potential for contamination of the water, so either the kettle must be carried to the latrine each time, or the kettle sought out after defecation. Similarly, in Jimma, Ethiopia, the reason given for the scarcity of hand washing facilities was that, for religious reasons, most people take water with them to wash after defecation which negates the need for separate hand washing facilities. These examples imply a greater level of hand washing than the study figures indicate. Whether hand washing is actually practiced in these situations is uncertain, and common sense would tend to suggest that if hand washing is not done at the latrine, it is often not done at all.

A deeper understanding of the triggers for hand washing (and other improved hygiene behaviours) is needed³³ if the results found in study for hand washing are to be improved upon. In some locations knowledge of hand washing correlated with having a hand washing facility but in others it did not. The reasons for this are not clear and so further investigation into the different processes for promoting hand washing used across the study locations is also warranted.

Re-working some of the analysis on the basis of OD/ODF households being defined as having a latrine with hand washing facilities and some of the other proxies for improved hygiene behaviour would also likely yield some interesting results.

³³ Recognizing that, globally, very few programs have been successful at achieving large-scale sustained handwashing improvements.

6.2 HEALTH

In contrast to perceptions amongst implementers in the sector and other research,³⁴ this study found that health was a significant influence on household behaviour. It was the most commonly cited motivator for initially building a latrine and for ODF households maintaining their latrines. The data collected for the study, however, did not test whether health knowledge itself is a driver – i.e. whether knowledge of health benefits of latrine use drives households to maintain their latrines or whether households that are already motivated to maintain their latrines also then cite health as a reason. Neither did the study test whether the health benefits are real or perceived.

A range of explanations are possible for the emphasis households placed on health. Health promotion during, or in parallel with, CLTS programming may have created an understanding that latrine use creates health. The frequency with which households in the study noted a relationship between diarrhoea and latrine use suggests that health education has played some role in informing their thinking. Health messages may have continued to influence household thinking even years after ODF status had been achieved. Rather than through education, however, some households may have been persuaded through their own experience that latrines improve health. In turn, these households may have been reporting real improvements in health or on their perception that health had improved. It would be feasible to test this through further investigations with households, comparing the incidence of WASH-related illness (either self-reported or through local health records) and the average expenditure of households on health care in non-ODF and ODF villages.

Implications for practice depend on what is revealed through further investigation of the role health plays in motivating households. If it is largely a response to the efficacy of education, then it suggests that health messaging in conjunction with CLTS promotion is important and that strong efforts in this area are worthwhile. This might involve strengthening or prolonging the CLTS follow up stage to allow for more health awareness messaging or linking in with other hygiene promotion programs, such as long-term government public health activities, as discussed above. Alternatively, if it is household experience of better health from long-term latrine use, either real or perceived, then the focus should be on other factors that drive households to sustain their latrines. In doing so, that will automatically strengthen households' perceptions of being healthier. There may also be value in considering a combination of these approaches, with the emphasis on health and non-health motivators varying over time.

Two further aspects of the study's findings about the significance of health as a factor in ODF sustainability are relevant. First, studies that demonstrate health improvements in response to CLTS are of significant benefit to government, donors and implementing partners but do not need to be repeated in every program. Agencies such as Plan can draw upon the emerging body of evidence in this area³⁵ to justify CLTS programming on the grounds of health outcome and cost-effectiveness. Secondly, whilst households in this study make a link between health and sanitation, this was not the case with hand washing (as noted above). This suggests that the health-inducing nature of hand

³⁴ Val Curtis, Keynote presentation, WASH Conference, Brisbane 2011

³⁵ For example, this issue is being evaluated in the large-scale DFID/UNICEF CLTS program in Zambia.

washing could be highlighted more prominently within initial hygiene education campaigns. If it is health awareness that is driving behaviour then this in itself may improve hand washing outcomes. If perceived health improvements are more important, then linking health to hand washing may also result in greater sustainability of increased hand washing rates. The quality and extent of health and hygiene messaging pre- and post-ODF certification and the correlation between that and the importance of health as a motivator amongst ODF households warrants further investigation. This could include an analysis of how hand washing promotion was treated, particularly the comparative attention paid to hand washing and latrine use.

There was some discussion amongst Plan staff during the concluding workshop about the timing of health promotion. Although the four country teams felt that health messaging should commence with the triggering, it may be more influential if provided after ODF achievement when households will have experienced a reduction in the incidence of diseases so that the messages would reinforce people's actual experiences. It was agreed that rather than making this an additional element to their CLTS programming, Plan should seek to link ODF communities more strongly to existing, long-term government health activities.

6.3 POST TRIGGERING AND POST-ODF SUPPORT

A strong theme to emerge from the study, and reinforced by the final workshop in Addis Ababa, concerned support to households following triggering (during the construction phase) and then also on-going support post-ODF declaration and certification. Support was provided both externally from Plan or government, and internally – households and community members supporting each other – which is strongly linked to the concept of community cohesion, and is discussed in Section 6.4. The type of support provided also seems to be important and is loosely divided into technical support and general support. These two are discussed in the sections that follow.

6.3.1 GENERAL SUPPORT

The study found that support is provided by both Plan and the government during the post-triggering period but mainly through monitoring of latrine construction and general encouragement to continue the momentum towards ODF status. Government health workers also provide a range of support and encouragement to households through health and hygiene promotion programs and regular household visits. However, very few households or village leaders reported systematic post-ODF support of any kind and it was asserted in the final workshop that in the absence of an external impetus it is strong community leadership that maintains community enthusiasm for their ODF status. It therefore follows that where strong leadership does not exist, households are at greater risk of abandoning their latrines and reverting to OD.

Whilst the study is unable to state this definitively, the results do support the notion that external support and encouragement influences household decisions about their latrines. OD households nominated a lack of support (both internal and external) as the third most important factor in their decision to abandon their latrines. The high number of households re-building their latrines between re-verification and Phase 2 (as described in Section 4.2.2) suggests that simple exposure to an external impetus can be a strong motivator. In Shebedino, where this phenomenon was strong, the

reason given was the return to the Woreda between the two study phases an influential natural leader which caused great shame amongst those households that had reverted to OD.

Provision of external support is clearly an area that implementing agencies such as Plan (or government) can influence through programming and policy. Whether resources would be better put to more frequent and targeted household visits by government health workers, semi-regular (every two years) re-verification programs, more formal support to natural leader networks, or just ongoing monitoring visits by Plan or local government staff is unclear. Hence, further work into the relative merits of different types of external support and contact would be beneficial.

6.3.2 TECHNICAL SUPPORT

The study found that higher quality latrines were more likely to last and be maintained. Whilst the concept of letting households decide on and build their own latrines is a good indicator of motivation, if left solely to people who are not technically skilled there is the risk that a proportion of the resulting infrastructure will be poor quality and so more likely to fail. Although only a relatively small percentage of the total sample (13%) no longer had a functioning latrine at the time of the data collection, the results and analysis suggest that within this group quality of construction and materials was a significant factor that led to the household decision to abandon their latrines. When a household makes the decision to build a latrine a number of technical decisions are also made including the design of the latrine, the materials to be used and so on. The study showed that households that maintained their latrines generally sought or had access to technical support in the form of advice, knowledge, material support and labour, whereas those that eventually abandoned their latrines did not.

This suggests that strategies to address technical issues faced by those whose latrines have collapsed or are prone to collapsing would further reduce the numbers of households abandoning their latrines. It would seem that the timing of this is important and the study suggests that there are two key times when external technical support should be provided:

- i. During latrine construction, prior to ODF certification.
- ii. Following rainy seasons or after sufficient time has elapsed that latrines are starting to deteriorate.

Targeted technical support soon after triggering would lead to better quality and more robust latrines and so fewer subsequent breakdowns. For example, ensuring that households with soft, sandy soil, are aware of the importance of good lining and so invest more upfront could prevent the demoralising effect of constant pit collapses and, conversely, those with rocky soil or limited space could be encouraged to consider dual pits so that they do not have ongoing issues or difficulties associated with constantly digging new pits.

It is difficult to predict upfront which households are going to build poor quality latrines so provision of technical support would need to be made widely available. This carries the inherent risk of moving programming towards heavy-handed engineering approaches and standardised designs, which is clearly contrary to the fundamental principles of CLTS. Careful thought therefore needs to be given to how technical support can be made available – whether directly from Plan or government or indirectly through enhancing existing community skills (e.g. masons). Whatever strategies are

employed, they would need to be firmly grounded in awareness of local conditions. As stated above, the majority of households do manage to get sufficient technical advice and support to maintain their latrines, so the aim of any intervention would simply be to broaden this access to all households.

6.4 COMMUNITY-LEVEL PROCESSES

The study found that in better performing (Type 1) communities there were higher levels of inter-household support. Whilst this is only one measure of the strength of a community, it does suggest that cohesive communities tend to foster ODF households. Strong leadership was also suggested by participants of the final workshop as a significant factor in fostering community ODF status. Whilst influencing formal community leadership structures is outside the control of implementing agencies, leadership can also be provided through strong natural leader networks which is something that CLTS programming can influence. The study did not collect quantitative data about strength of leadership. A systematic investigation of the link between this and community ODF status is recommended as an area for further work.

Two other issues related to community level processes also emerged from the study and should be considered for future CLTS programming. Firstly, the study data indicated a relationship between attendance at triggering (and who from the household attends) and continued maintenance of a latrine. Although in several locations (notably Jimma and Kilifi) either no correlation or a negative correlation was observed, the country teams suggested the reason for this was that where villages were triggered by natural leaders rather than ‘external’ facilitators from Plan, households do not consider themselves as having been triggered, and so responded in the negative to the question as to who in the household attended. This was not able to be confirmed from the data set and so is speculative and would benefit from further investigation. The data suggests that the quality of triggering is likely to be important, and that women’s attendance is more significant than men’s, but again the study is unable to state these with any certainty, and so further investigation of these aspects of CLTS is warranted. Overall, however, it is recommended that effort be directed to encouraging attendance at triggering events by as many households as possible – and as many people from each household as possible.

Secondly, as stated above, where households and neighbours supported each other ODF status was maintained at a higher level than where this was absent. This issue of what could be loosely termed as ‘cohesive communities’ was only touched on in the study but indications are that it is important. Some further investigation into the dynamics of what constitutes a socially cohesive community is warranted. Whilst it is unlikely that Plan can directly generate community cohesion to any extent at scale, there may be indirect ways that Plan can support government-led programs to encourage mutual support between households within communities. For example, promoting ways for communities to provide collective labour and/or materials to poorer or disadvantaged households. Investigating other community-processes such as the issue of penalties, regulations and enforcement, as well as further clarification of the nature of mutual support between households, is recommended.

6.5 ACCESS TO FINANCE

The cost of sanitation is clearly of significance to households. Being able to use local materials to build simple, low-cost latrines cheaply or without a financial outlay is a significant motivator for many households to become ODF. As discussed above, however, this leads in many instances to poor quality latrines being constructed which then causes problems later. It was also striking amongst that results that there was almost no evidence of latrines having been upgraded in the period since ODF was declared. Ninety-eight percent of latrines were simple pit latrines, suggesting that at best only 2% had been upgraded.

Whilst it is undoubtedly true that many households in the study sample could not afford expensive commercial materials to construct their latrines, the findings suggests that in many instances it is not lack of funds that prevents this investment but prioritisation of other household expenditure over latrines. Further research is warranted into the link between household wealth and sustaining ODF status. This could include testing whether greater wealth correlates with greater expenditure on latrine construction and subsequent maintenance or upgrading; and whether different members of the household are more or less likely to allocated finance towards sanitation.

Use of sanitation marketing to encourage households to invest in commercial materials – either immediately in response to CLTS triggering or shortly thereafter – is discussed below. Implementers could be encouraged to learn about typical household discretionary expenditure in their program area, drawing upon existing information from other programs or agencies (such as national socio-economic data). This knowledge could be useful for implementing teams when working with communities post-triggering and providing encouragement to invest in sanitation.

For some households, a lack of funds will be a genuine constraint on their ability to invest in more robust, durable latrines. For these households, opportunities to access credit, for example through micro-finance schemes or community initiatives, may help to overcome financial barriers. Clearly this must not impact upon the central, non-subsidy tenet of the CLTS approach. Examples of initiatives that have already started in the study locations include village savings and loans schemes (VSLs) in Sierra Leone and Uganda that provide a line of credit to cash-poor households from within the community and, in Kenya, a system whereby masons charge for their services according to household wealth.³⁶

6.6 SANITATION MARKETING

The study found that households almost universally built very simple pit latrines using locally available materials. There was no evidence to suggest that households were moving up the sanitation ladder to any significant extent. As discussed under ‘Technical Support’ above, the study found that better quality latrines with more durable materials were associated with households remaining ODF.³⁷ This suggests that initiatives that promote access to better quality materials and construction would be worthwhile. For households that are at risk of abandoning their latrines and reverting to OD mainly due to pits collapsing, commercial materials for slabs and pit lining would be

³⁶ These descriptions were provided by participants during the Final Workshop in Addis Ababa.

³⁷ ODF here refers to continuing to maintain a functioning latrine

helpful. For those households that still have functioning latrines (the majority of households within the study sample), post-ODF programming should encourage replacing simple pit latrines with improved versions.

These findings from the study highlight the advantages of linking CLTS programming deliberately with sanitation marketing. Participants in the final workshop described some small-scale sanitation marketing initiatives having been initiated in the study areas. Activities to strengthen both supply and demand for commercial goods and services were mentioned, including training of masons and other private sector actors and establishing village savings and loans schemes (noted above). Participants at the workshop, however, were unclear about the timing, extent and location of these sanitation marketing initiatives. Discussions suggested that their reach and intensity had been very limited and certainly the study findings indicate that these activities have not had any significant impact on latrine quality.

It would be useful to trial a well-designed and resourced sanitation marketing program in some of the areas covered by the study. This would enable Plan to determine whether sanitation marketing conducted several years after ODF status has been achieved can be effective in facilitating households to improve their sanitation infrastructure. It would be appropriate to select Type 1 (high performing) villages for these trial(s) where household demand for sanitation was found to be strongest. As noted in Section 6.3, it would also be useful to investigate at what point after triggering the introduction of sanitation marketing is most effective.

6.7 OTHER AREAS FOR FURTHER WORK

The results of this study by no means tell the full story of the sustainability of ODF communities and households, but could be considered formative research that gives better focus for continued investigation and effort into why people choose to continue to use their latrine or abandon it and return to OD. Understanding human nature is complex, and this study has only touched on some of the issues and factors that seem to have some significance in influencing household decision making around latrine use. The process of collating and analysing the data collected during this study has thrown up more questions than it has answered.

A number of possible areas for future investigation related to the six general themes that emerged from the study. The following is a list (in no particular order) of some other areas for further work that came from the analysis of the data set.

Factor Analysis: A more refined **analysis of the factors** is recommended – correlating households that nominate a particular factor against other household level characteristics. For example, the factor M2 (wanting to be like others) - nominated 187 times under initial motivation to build the latrine – could be correlated against reversion – i.e. was there a higher reversion rate amongst this group than others?

Related to this is the relationship between pits filling up and reversion to OD. There was not much data on pits filling up in the study data set – although pit depths were collected. This has not yet been examined and so would be a good area for further investigation and also for future research.

There was overlap between many of the factors but the analysis as described in this report looked at them discretely. A re-examination of the original recorded comments by households breaking them into primary and secondary factors and doing a more in-depth analysis may reveal a clearer picture of the important factors and reduce the overlap.

Health vs. Disgust & Shame: Disgust as a motivator seems to drop off over time, whilst health was strongly represented amongst the factors nominated by ODF households. Further probing of this is recommended, including looking at the issue of health promotion and health messaging in an attempt to understand what kinds (and timing) of messages are most influential.

Availability of water: Men and women disagreed in several locations as to whether or not they had a water supply. The reasons for this are unclear and warrant further investigation.

Latrine Timelines: A lot of data was collected with the timelines but has yet to be fully analysed – mainly due to the variability of the quality of the data and the way it was recorded. For example it may be possible to investigate the issue of slippage over time to see if this correlates in any way with other sustainability factors.

Finally, the methodology was meant to allow household members freedom to say whatever they wanted, rather than answering specific questions. The probing questions were only meant to be used once the discussion had moved in a particular direction. It is not clear exactly how well this was done and so it is recommended that if this methodology is to be used again, some further checking of the rigour of the qualitative data collection methodology should be done.

ANNEXES

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Checked	
Entered	

Survey Number	
Date	

HH head first name		Enumerator Name	
HH head sex (M/F)		Village Name	
Number of people in HH		Sub-district	
Easting		District	
Northing			

	Section A – Latrine Status	Data (Circle option or write information)
Q1a	<i>If household member present:</i> Where is the toilet facility that members of your household normally use?	In House In yard/compound (go to Q2) Neighbour's house/yard Public latrine Open Defecation (go to Section B)
Q1b	<i>If no household member present:</i> Is there a latrine in the household or compound?	Yes No (if no, go to Section B)
Q2.	What is the type of latrine? If other, please specify type of latrine	Pit VIP Pour Flush Other
Q3.	Is there evidence that the latrine is being used?	Yes No (see notes)
Q4.	What is the depth of the pit (leave blank if unsure)?	
Q5.	Is the pit lined?	Yes No Unsure
	If yes, what is the pit lined with?	Wood Bamboo Masonry Stone Tin
Q6.	What is the floor (slab) constructed of?	Wood Bamboo Masonry Earth Tin
Q7.	Is there a cover/lid for the hole?	Yes No
Q8.	Is the cover/lid over the hole?	Yes No
Q9.	Is there a pan or squat plate?	Yes No
	If yes, what is the pan/squat plate made of?	Wood Masonry Ceramic
Q10.	What are the latrine walls constructed of?	Wood Bamboo Masonry Tin Plastic Thatch Cloth/Sack
Q11.	What is the latrine roof constructed of?	Thatch Tin Plastic No roof
Q12.	Is there a vent pipe?	Yes No
Q13.	What is the latrine door constructed of?	Wood Bamboo Tin Plastic Cloth/Sacking No Door
Q14.	How clean is the latrine?	Good Fair Poor (see notes)

	Section B - Handwashing	
Q15.	Does the household have handwashing facilities?	Yes No (if no, go to Section C)
Q16.	Is there water available?	Yes No
Q17.	Is there soap, ash or other type of cleansing agent present?	Yes No
Q18.	Is there evidence that the handwashing facilities are used?	Yes No (see notes)

	Section C - General	
Q19.	Is there any evidence of Open Defecation visible?	Yes No

Comments or Observations

List of Materials:

Wood | Bamboo | Masonry (concrete, brick) | Stone | Earth/Clay | Tin/Metal | Plastic | Ceramic | Thatch | Cloth/Sacking

Notes on Evidence of Use:

Latrines - look for fresh faeces in pit, recent flushing for pour flush latrines, worn track to latrine from house.

Handwashing - wetness on ground below handwashing facility, worn track and other signs of recent use.

Notes on Cleanliness of Latrine:

Good = No sign of shit anywhere. Clean and tidy

Fair = Some shit around pan/squatting plate only

Poor = Shit on floor, walls etc

<u>Checked</u>	
<u>Entered</u>	

Name of Village Chief		Sub-district	
Village Chief sex (M/F)		District	
Village Population		Country	
Total # men			
Total # women		Enumerator Name	

	Section A – School Latrine Status	Data (circle option or write information)			
Q1.	Is there a School in the Village	Yes	No	(if no, go to Section B)	
Q2.	Does the school have latrines?	Yes	No	(if no, go to Section B)	
Q3.	What is the type of latrine?	Pit	VIP	Pour Flush	Other
Q4.	How many cubicles for boys, girls & teacher	B	G	T	
Q5.	Is there evidence that the latrines are being used?	Yes	No	(see notes)	
Q6.	How clean are the latrines?	Good	Fair	Poor	(see notes)
Q7.	Are there handwashing facilities?	Yes	No		
Q8.	Is there water available?	Yes	No		
Q9.	Is there soap, ash or other type of cleansing agent present?	Yes	No		
Q10.	Is there evidence that the handwashing facilities are used?	Yes	No	(see notes)	

	Section B – Clinic Latrine Status	Data (circle option or write information)				
Q11.	Is there a Clinic in the Village	Yes	No	(if no, go to Section C)		
Q12.	Does the clinic have a latrine?	Yes	No	(if no, go to Section C)		
Q13.	What is the type of latrine?	Pit	VIP	Pour Flush	Other	
Q14.	Is there evidence that the latrine is being used?	Yes	No	(see notes)		
Q15.	How clean is the latrine?	Good	Fair	Poor	(see notes)	
Q16.	Are there handwashing facilities?	Yes		No		
Q17.	Is there water available?	Yes		No		
Q18.	Is there soap, ash or other type of cleansing agent present?	Yes		No		
Q19.	Is there evidence that the handwashing facilities are used?	Yes	No	(see notes)		

	Section C – Public Latrines	
Q20.	Are there public latrines in the village?	Yes No (Refer to page 2)

	Section D - General			
Q21.	Is there any evidence of Open Defecation visible?	Yes	No	
Q22.	Are any parts of the village subject to flooding?	Yes	No	Unsure
	If yes, what percentage of the village floods? (ask Village Chief)			
Q23.	What are the general soil conditions like in the village	Sandy	Clay	Rocky

Comments or Observations	

	Public Latrine Status	Data (circle option or write information)
Q24.	Where is the latrine located (ie road)	
Q25.	GPS location - Easting	
Q26.	GPS location - Northing	
Q27.	What is the type of latrine?	Pit VIP Pour Flush Other
	If other, please specify type of latrine	
Q28.	Is there evidence that the latrine is being used?	Yes No (see notes)
Q29.	What is the depth of the pit (leave blank if unsure)?	
Q30.	Is the pit lined?	Yes No
	If yes, what is the pit lined with?	Wood Bamboo Masonry Stone Tin
Q31.	What is the floor (slab) constructed of?	Wood Bamboo Masonry Earth Tin
Q32.	Is there a cover for the hole?	Yes No
Q33.	Is the cover over the hole?	Yes No
Q34.	Is there a pan or squat plate?	Yes No
Q35.	If yes, what is the pan or squat plate made of?	Wood Masonry Ceramic
Q36.	What are the latrine walls constructed of?	Wood Bamboo Masonry Tin Plastic Thatch Cloth/Sack
Q37.	What is the latrine roof constructed of?	Thatch Tin Plastic No Roof
Q38.	Is there a vent pipe?	Yes No
Q39.	What is the latrine door constructed of?	Wood Bamboo Tin Plastic Cloth/Sacking No Door
Q40.	How clean is the latrine?	Good Fair Poor (see notes)
Q41.	Are there handwashing facilities?	Yes No
Q42.	Is there water available?	Yes No
Q43.	Is there soap, ash or other type of cleansing agent present?	Yes No
Q44.	Is there evidence that the handwashing facilities are used?	Yes No (see notes)

	Public Latrine Status	Data (circle option or write information)
Q45.	Where is the latrine located (ie road)	
Q46.	GPS location - Easting	
Q47.	GPS location - Northing	
Q48.	What is the type of latrine?	Pit VIP Pour Flush Other
	If other, please specify type of latrine	
Q49.	Is there evidence that the latrine is being used?	Yes No (see notes)
Q50.	What is the depth of the pit (leave blank if unsure)?	
Q51.	Is the pit lined?	Yes No
	If yes, what is the pit lined with?	Wood Bamboo Masonry Stone Tin
Q52.	What is the floor (slab) constructed of?	Wood Bamboo Masonry Earth Tin
Q53.	Is there a cover for the hole?	Yes No
Q54.	Is the cover over the hole?	Yes No
Q55.	Is there a pan or squat plate?	Yes No
Q56.	If yes, what is the pan or squat plate made of?	Wood Masonry Ceramic
Q57.	What are the latrine walls constructed of?	Wood Bamboo Masonry Tin Plastic Thatch Cloth/Sack
Q58.	What is the latrine roof constructed of?	Thatch Tin Plastic No Roof
Q59.	Is there a vent pipe?	Yes No
Q60.	What is the latrine door constructed of?	Wood Bamboo Tin Plastic Cloth/Sacking No Door
Q61.	How clean is the latrine?	Good Fair Poor (see notes)
Q62.	Are there handwashing facilities?	Yes No
Q63.	Is there water available?	Yes No
Q64.	Is there soap, ash or other type of cleansing agent present?	Yes No
Q65.	Is there evidence that the handwashing facilities are used?	Yes No (see notes)

Add more sheets if there are more than 2 public latrines in the village

Notes on Evidence of Use:

Latrines - look for fresh faeces in pit, recent flushing for pour flush latrines, worn track to latrine from house.

Handwashing - wetness on ground below handwashing facility, worn track and other signs of recent use.

Notes on Cleanliness of Latrine:

Good = No sign of shit anywhere. Clean and tidy

Fair = Some shit around pan/squatting plate only

Poor = Shit on floor, walls etc

Before you start:

Complete as much of the initial part of the form as possible, including

- the date,
- the survey number,
- your name,
- the name of the village, sub-district and district.

Make sure the GPS is switched on when you arrive in the village.

Arriving at a house:

When you arrive at a house, stand in front of the door and note the location (Easting & Northing) from the GPS (see separate instructions)

If there is a household member present, ask to speak with

- the head of the household, or if they are not present,
- an adult member of the household, or if there is no adult,
- the oldest child
- A neighbour, or a local person who knows the household

Ask the name of the household head, and note whether they are a man or a woman.

Ask the number of people who live in the household, including men, women and children.

Question 1:

If there is a household member present, ask the question at Q1a:

Where is the toilet facility that members of your household normally use?

Circle the response they give on the form. If they indicate the latrine in their house or yard, proceed to Q2. If they indicate that they go elsewhere to defecate then circle the response and proceed to Section B (handwashing).

If there is no household member present, look around to see if you can see a latrine (or ask a neighbour/local person who knows the household), and circle the response at Q1b. If there is no latrine, proceed to Section B.

Question 2: Types of Latrines

The following pictures show some examples of different types of latrines, and variations in the designs. These do not cover all types, but show the basic features.

Simple Pit Latrines:

Pit latrines are simple holes in the ground, covered by a slab structure with a small hole in the middle into which people defecate (and urinate).



Ventilated Improved Pit Latrines (VIP)

VIP latrines are improved pit latrines that include a vent pipe and a number of other design features that reduce smell and prevent flies accessing the pits.

**Pour Flush Latrines**

Pour flush latrines consist of squat pans that have a water seal (a U-bend) that stops smells coming up from the pit. There should be a source of water nearby so that once people have finished defecating they can scoop up water to pour into the pan to flush the waste down into the pit.

**Question 3: Evidence of Use**

If the latrine is a pit latrine, shine a torch into the pit and look for fresh faeces

If the latrine is a pour flush, look for signs of recent flushing

Other signs include a well used and worn track to latrine from house, a supply of tissue paper or other anal cleansing materials.

Question 4: Depth of latrine

If you can see into the pit, shine a torch in and estimate the depth (in metres). If not you can ask the household member if they know. Otherwise do not write a response (Do not guess if you don't know).

Question 5: Pit Lining

If you can see into the pit, shine a torch in and see what the pit is lined with. If not you can ask the household member if they know, otherwise circle unsure. Do not guess if you don't know.

Question 6: Latrine floor.

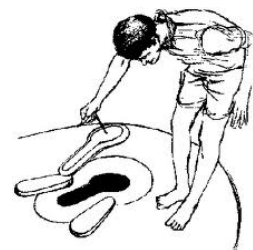
The latrine floor or slab is the structure that covers the pit, on which people stand and squat to use the latrine. It can be made of concrete (see pictures above), earth (usually reinforced with sticks), tin or metal, timber or bamboo. For pour flush latrines it will almost always be concrete/masonry.

Question 7 & 8: Cover/lid

The cover or lid is a removable object that covers the hole into which people defecate. (see picture)

Note whether or not there is one (circle yes or no) and also whether it is over the hole at the time you visit (circle yes or no)

Leave blank for pour flush latrines.

**Question 9: Pan/squat plate**

The pan or squat plate is the object that people squat on to defecate. It normally has places to put ones feet either side of the hole. It can be part of the slab or cast into the (concrete) slab.

Question 10: Latrine walls

Note the material that the latrine walls are constructed of.

Question 11: Latrine roof

Note the material that the latrine roof is constructed of (circle **no roof** if there is none)

Question 12: Vent pipe

Note whether or not there is a vent pipe from the pit (circle **yes** or **no**)

Question 13: Latrine door

Note the material that the latrine door is constructed of (circle **no door** if there is none)

Question 14: Latrine cleanliness

Indicate the overall cleanliness of the latrine, using the following as a guide:

- Good = No sign of shit anywhere. Clean and tidy
- Fair = Some shit around pan/squatting plate only
- Poor = Shit on floor, walls etc

Question 15: Handwashing facilities

Ask the household member (or look around the latrine to see) if there are handwashing facilities there. The pictures below show a couple of simple 'tippy tap' type handwashing systems. There may also be other types of handwashing, such as a tap, or a bucket/barrel of water etc. If there are no handwashing facilities, go to Section C.

**Question 16: Water for handwashing.**

Note whether there is water present and available for handwashing at the time of the visit

Question 17: Soap etc

Note whether there is any cleaning agent, including soap, ash or some other type, available at the time of the visit

Question 18: Evidence of use

Look for signs that people have recently washed their hands, for example wetness on ground below handwashing facility, worn track and other signs of recent use.

Question 19: Signs of OD

Have a look around the compound, yard and environment around the house. Are there any fresh or dried human faeces around?

Finally make a note of anything else you think might be relevant or useful for the survey, or any unusual things that you think should be noted.

ANNEX B – PHASE 2 DATA COLLECTION DOCUMENTS

Checked	
Entered	

Village Name	
Date	
Survey No. (Same as reverification no.)	

Household Information	
HH Head First Name:	
HH Head sex	
	Present
Number of men:	
Number of women:	
Number of male children:	
Number of female children:	

Enumerator names	
Informed consent	Yes No
GPS – Easting	
GPS - Northing	
Latrine Status	OD ODF

Vulnerable Household? Female headed Child headed PLWD1 PLHA2 Very poor Other (specify)
(select all that apply)

1 Latrine Observation

(Complete for ODF households only in places where information not available or different from Re-verification data)

A1	What is the type of latrine?	Pit	VIP	Pour Flush	Other
	If other, please specify type of latrine				
A2	Is there evidence that latrine is being used? [eg smell, path]	Yes	No		
A3	How much room left in pit (leave blank if unsure)?				
A4	Is the pit lined?	Yes	No	Unsure	
	If yes, what is the pit lined with?	Wood	Bamboo	Masonry	Stone Tin
A5	What is the floor (slab) constructed of?	Wood	Bamboo	Masonry	Earth Tin
A6	Is there a cover/lid for the hole?	Yes	No		
A7	Is the cover/lid over the hole?	Yes	No		
A8	Is there a pan or squat plate?	Yes	No		
	If yes, what is the pan/squat plate made of?	Wood	Masonry	Ceramic	
A9	What are the latrine walls constructed of?	Mud. Bricks/blocks	Wood Tin	Thatch. Plastic	Bamboo Cloth/Sack
A10	What is the latrine roof constructed of?	Thatch	Tin	Plastic	No roof
A11	Is there a vent pipe?	Yes	No		
A12	What is the latrine door constructed of?	Wood	Bamboo	Tin	Plastic Cloth/Sacking
		No Door			
A13	How clean is the latrine?	Good	Poor		
A14	Is anything broken/damaged on the latrine?	Yes	No		
	If yes, describe. [Examples: cracks on floor, collapsed roof]				
A15	Is there a handwashing facility near the latrine?	Yes	No		
A16	Is there water available in the handwashing	Yes	No		
A17	Is there soap, ash or other cleansing agent?	Yes	No		
A18	Is there evidence that the handwashing facilities are used? [e.g. signs of wetness]				

[illegible]

3 Why did you decide to build your first latrine? (Motivators)

Factor Code	Summary of discussion (use back of page if more room is required)
1. (e.g. A1)	
2.	
3.	
4.	
5.	

4 What made it easy or difficult to build first latrine? (Enablers or Barriers)

Factor Code	Summary of discussion (use back of page if more room is required)
6. (e.g. A1)	
7.	
8.	
9.	
10.	

5 Why have you continued to use/maintain your latrine OR gone back to shitting in the bush? (Motivations for current status - OD or ODF)

Factor Code	Summary of discussion (use back of page if more room is required)
1. (e.g. A1)	
2.	
3.	
4.	
5.	

6 What made it easy or difficult to maintain/repair your latrine? (Enablers or Barriers for current status)

Factor Code	Summary of discussion (use back of page if more room is required)
6.	
7.	
8.	
9.	

7 Current Status - Factors and Ranking

	MOTIVATORS FOR CONTINUING TO USE/MAINTAIN LATRINE		Women	Men
	Code	Factor Name	Rank	Rank
1				
2				
3				
4				
5				

	ENABLERS & BARRIERS FOR CONTINUING TO USE LATRINE		Women	Men
	Code	Factor Name	Rank	Rank
1				
2				
3				
4				
5				

8 Household Survey Questions

	Question	Responses
H1.	How many people are there living in this household?	____ Number of adult women (16-60) ____ Number of adult men (16-60) ____ Number of girls (3-15) ____ Number of boys (3-15) ____ Number of infants (<3) ____ Number of elderly women (>60) ____ Number of elderly men (>60)
H2.	What is the highest Level of education of the household head or person being interviewed? (circle)	1 No formal education 2 Primary school 3 Lower secondary school 4 Upper secondary school 5 Tertiary
H3.	Did anyone in the household attend the CLTS triggering? If yes, who?	Yes No. If yes, who? ____ Number of adult women ____ Number of adult men ____ Number of girls ____ Number of boys
H4.	Where do people in your household shit when they go to the fields or are away from home?	1 Bush/OD 2 Public/school/clinic latrine 3 Home latrine 4 Other (explain)
H5.	Do you have a child who is too young to go to the toilet by themselves?	Yes No.
H6.	If YES the last time that child defecated, where were her/his faeces disposed (i.e. where thrown?)	1 Dropped into toilet 2 Buried

		3 Solid waste/trash 4 In the yard 5 Outside the yard 6 Public latrine 7 Into a waterway 8 Elsewhere (specify): Not applicable
H7.	Are there people in the household who do not or cannot use the toilet?	____ Number of adult women ____ Number of adult men ____ Number of girls ____ Number of boys ____ Number of infants ____ Number of elderly women ____ Number of elderly men ____ Number of disabled women ____ Number of disabled men
H8.	If yes (to question H7), specify what modifications, if any, you have made to help them.	____ Number If modifications made, specify what type
H9.	Please mention all of the occasions when is it important to wash your hands. <i>(Do not read the answers. Circle all that apply. If the respondent indicates that she does not know, do not probe for additional responses.)</i>	1 Before eating 2 After eating 3 Before praying 4 Before breastfeeding or feeding a child 5 Before cooking or preparing food 6 After defecation/urination 7 After cleaning a child that has defecated/ changing a child's nappy 8 When my hands are dirty 9 After cleaning the toilet or potty 10 Other 11 Does not know
H10.	Do you have any soap, ash or mud in your household for washing hands? Can you show it to me. <i>(Record observation and circle all that apply.)</i>	1 No 2 Yes, but not able to show 3 Bar soap 4 Detergent (powder/liquid) 5 Liquid soap 6 Ash 7 Mud
H11.	Do you think having and using a latrine made your family healthier? (circle)	1 Less healthy 2 No change in health 3 A little healthier 4 Much healthier
H12.	Who is mostly responsible for collecting water in your household	1 adult women 2 adult men 3 girls (<15 years old) 4 boys (<15 years old)
H13.	In the dry season, where do you collect your water for hand washing and use in the toilet (if applicable)	1 water piped into yard or house 2 public tap stand 3 tube well/borehole 4 open well 5 other water sources
H14.	In the dry season, how much time does it take on average to go to the that water source, get water, and come back?	1 30 minutes or less 2 31 to 60 minutes 3 1 hour to 3 hours 4 More than 3 hours

		5 Does not know
H15.	How much did your toilet cost you to build	Labour: Transport: Materials: Total:
H16.	What specific support did you receive when you built your latrine?	Labour – from whom? Materials – from whom? Money – from whom?
H17.	How much have you spent on your repairs or upgrades to your latrine since it was built? List the costs.	Slab: _____ Digging: _____ Buy & transport sand: _____ Bricks: _____ Vent Pipe: _____ Iron, nails, and timber: _____ Labour: _____ Other: _____ Total:
H18.	Does your toilet suffer any of the following problems Circle those that apply – leave blank for No	1 collapsing soil 2 high water table entering bottom of the pit (especially in wet season) 3 prone to flooding in wet season 4 other (specify – eg termites)
H19.	In the last 3 months have you carried out any repairs or maintenance for any of the following problems. Circle all those that apply.	Yes No. If yes, which problems? 1 Roof problems 2 Slab problems 3 Pit overflow 4 No water in tank 5 Flushing mechanism broke down 6 Bowl overflow/clogged 7 Pipe breakdown 8 Others (specify): 9 Does not know
H20.	Are you aware of any village laws or regulations relating to having and using a latrine?	Yes/No (circle) If yes, specify

9 Your own comments on the interview

Tell us how the interview went. (See the Guide for examples)

<u>Checked</u>		Enumerators		Village Name	
<u>Entered</u>				Date	
				Village Type	Practising ODF
					Medium ODF
					Weak ODF

Respondents – Circle	MEN	WOMEN
Name	Position/Role	Informed consent? Sign or tick

1. CLTS Promotional/Support Activities

[illegible]

2. Why did villagers build their first latrines? (Motivators)

Factor Code	Summary of discussion (use back of page if more room is required)
1. (e.g. A1)	
2.	
3.	
4.	
5.	

3. Why are people continuing to use their latrines and not going back to OD? (Motivations for continuing ODF)

Factor Code	Summary of discussion (use back of page if more room is required)
1. (e.g. A1)	
2.	
3.	
4.	
5.	

4. Motivation for Continuing ODF—Factors and Ranking

	Code	Factor Name	Ranking
1			
2			
3			
4			
5			
6			
7			
8			

5. What made it easier to build latrines? (enablers or blocks)

Factor Code	Summary of discussion (use back of page if more room is required)
1 (e.g. A1)	
2	
3	
4	
5	

**6. Why have HHs stopped using latrines and gone back to shitting in the bush?
(De-Motivators & De-Facilitators – reasons for reverting to OD)
(only for OD Households)**

Factor Code	Summary of discussion (use back of page if more room is required)
1. (e.g. A1)	
2.	
3.	
4.	
5.	

7. Why reverting to OD—Ranking (only for OD Households)

	Code	Factor Name	Rank
1			
2			
3			
4			
5			
6			
7			
8			

8. Women's problems re using/maintaining latrines? (WOMEN'S GROUP)

Extra: Describe how menstrual hygiene affects women in your village and influences their decision to use or not use a latrine.

Factor Code	Summary of discussion (use back of page if more room is required)
1. (e.g. A1)	
2.	
3.	
4.	
5.	

9. Village Survey Questions

	Topic	Question
V1.	Is there a village water supply system?	<p>Yes No If yes: how many months per year does it operate? ____ months</p> <p>Is it managed by the community? Yes/No</p> <p>Do people pay for this service? Yes/No</p>
V2.	Where do most households get water for use at home: <i>(write approximately how many households for each type)</i>	<ul style="list-style-type: none"> • ____ water piped into yard or house • ____ public tap stand • ____ tubewell/borehole • ____ open well • ____ other water sources
V3.	Is there a service available for emptying pits or de-sludging?	Yes No
V4.	Are there or have there been subsidies offered for building latrines? <i>(select all that are applicable)</i>	<p>Yes No If yes, then what type?</p> <ul style="list-style-type: none"> • Financial • Materials • Technical Assistance • Other (specify) <p>If any are still being offered, please note.</p>
V5.	Are there any by-laws relating to having and using a latrine?	<p>Yes No</p> <p>Specify</p>
V6.	Are there any penalties for not having or using a latrine?	<p>Yes No</p> <p>Are the by-laws enforced? Yes/No</p>
V7.	Is there a committee responsible for sanitation in the village?	<p>Yes No If yes:</p> <p>number of women____; number of men____</p> <p>how often does it meet____</p> <p>when was last meeting____</p> <p>how effective is it (0-10)____</p> <p>What is its role?</p>
V8.	Have any new households been built since ODF verification/certification? Are they migrants or newly married couples?	<p>Yes No If yes, who are they:</p> <ul style="list-style-type: none"> • Migrants – how many? How many of those have built latrines? ____ • Newly married couples – how many? How many of those have built latrines? ____
V9.	Are there groups within the village who are different or do not get along?	Describe.

V10.	Has any follow-up occurred since verification/certification? If so, briefly describe what.	<ul style="list-style-type: none"> • Plan staff • Local Government • National Government • Other people (specify who)
V11.	Are there any cultural or social reasons why some people in the village do not use latrines?	
V12.	Has there been a change in the incidence of illness or disease since ODF verification/certification?	
V13.	What hand-washing promotion has been provided in the community? Is there evidence of hand-washing promotion (e.g. posters or leaflets)?	
V14.	How many CLTS natural leaders were appointed in the community?	<ul style="list-style-type: none"> • Women ____ • Men ____ • Children ____

10. Your own comments on the discussion

Tell us how the discussion went. See the Guide for examples.

ANNEX C – FACTOR LIST

Motivating Factors

WHY DID YOU BUILD A LATRINE IN THE FIRST PLACE? WHY DO YOU MAINTAIN & REPAIR YOUR LATRINE?

M1	Accessibility for all Household Members
	<ul style="list-style-type: none"> Can all members in the household use the toilet? Are there people with disability in the house? Can they use the toilet? Is the latrine accessible and safe for use by children? Is the latrine accessible and easy to use by the elderly?
M2	Wanting to be like others (Competition/avoiding stigma)
	<ul style="list-style-type: none"> Did you neighbours build a latrine before you – how did that make you feel? Did any nearby villages become ODF before your village? How did that make you feel? Do you feel more accepted by the community for building and maintaining latrine? Are other community members stigmatised for not having a latrine and shitting in the bush?
M3	Convenience, comfort (location)
	<ul style="list-style-type: none"> Why is your toilet comfortable and convenient? Who in your household regards the toilet as comfortable and convenient? Explain. Are there facilities in latrine for menstruating women? How far is the latrine from the house? Is it easy to get to for everyone? Is it accessible at night? Or when it is raining?
M4	Privacy & Security (location)
	<ul style="list-style-type: none"> Do you feel safe when you go to defecate (either in your latrine or practicing OD)? Are people happy with their toilet because they can defecate in private? Has a lack of privacy discouraged ongoing use of the toilet? How far is the latrine from the house? Is it easy to get to for everyone? Is it accessible at night?
M5	Cultural, Religious, Moral beliefs
	<ul style="list-style-type: none"> What are the cultural reasons that encouraged you to build and use a toilet? Are there cultural reasons preventing the shared use of toilets by men and women, or in-laws? Explain. Does your religious belief or religious leader influence your decision to build and use a latrine? What does it/they say?
M6	Shame, Disgust, Pride, or Fear
	<ul style="list-style-type: none"> How does open defecation make you feel? Do you feel ashamed about your own OD or others? Does pride in having a toilet motivate you to continue to use and maintain it? How do you feel about your latrine/environment when visitors come to your house or village? What fears do you have for your family regarding OD practices

M7	Health
	<ul style="list-style-type: none"> What are the health reasons/benefits for using a toilet? What improvements have you noticed in your family's health?
M8	Improving things for the family
	<ul style="list-style-type: none"> How do you compare your family situation before and after having a toilet?
M9	Force (by-laws, penalties/fines, deadlines and threats)
	<ul style="list-style-type: none"> What pressure was used by community leaders to force you to build a latrine? Are there rules/by-laws? Were there deadlines to build latrine? Are there fines/ penalties? Were you threatened? Did you receive visits by leaders to exert pressure? Who forced or threatened you? How? Are the deadlines/by-laws/fines enforced?
M10	Rewards and Incentives
	<ul style="list-style-type: none"> What were you promised to build your latrine – Money? Materials? Prizes? Recognition? Village certificate? Did you actually receive anything (money, materials, prize, recognition) for building your latrine? Describe.
M11	Follow-up Visits, Advice, & External Support
	<ul style="list-style-type: none"> What forms of support have you received from people who from outside your village? <ul style="list-style-type: none"> Visits to encourage? Who visited? What did they do? Help with getting materials or with construction (eg digging the pit)? Advice on how to build the latrine or get materials? Rewards for good/quick efforts?
M12	Sanitation or hygiene promotion campaigns
	<ul style="list-style-type: none"> What sanitation or hygiene promotion campaigns have been organised in your village over the last few years to support latrine building or upgrading? <ul style="list-style-type: none"> Local artisans, shops or traders selling sanitation products or selling their services? Training of local artisans Hygiene promotion campaigns? Have you purchased any commercial items or services to upgrade your latrine? What sort of items and how much did you spend? What local artisans or shops selling sanitation products are you aware of?

Enabling Factors

WHAT HAS MADE IT EASY TO BUILD AND MAINTAIN YOUR LATRINE?

F1	Local soil and ground conditions
	<ul style="list-style-type: none"> Describe the ground conditions which made building or repairing the latrine easy? <ul style="list-style-type: none"> sandy soil - making the pit easy to dig? rocky – making it self- supporting? What did you do to make it easier to dig? (eg building on anthill, finding a good site, etc)
F2	Availability of land, materials, labour
	<ul style="list-style-type: none"> How did you get the following to build the latrine - <ul style="list-style-type: none"> Land? Materials – what materials? how acquired? cost? Labour – who built? cost? How easy/difficult was it to get the above? If difficult explain why Is there space for you to move/rebuild your latrine if the pit fills up?
F3	Availability of water
	<ul style="list-style-type: none"> Does the water supply make it easy or difficult to use the toilet? Is there water for flushing? Cleaning? Handwashing? Where is the nearest water source? How far from the latrine? Whose job is it to collect and refill the water used in the handwashing facility?
F4	Quality of initial construction
	<ul style="list-style-type: none"> Was the quality good, fair or poor? Why was the construction quality good or bad? Who constructed it? If the quality was good, or poor, how has this affected people's use and maintenance of the latrine?
F5	Technical Advice or Knowledge
	<ul style="list-style-type: none"> Who advised you on how to build your latrine? Someone from in the village or outside the village? What advice did you receive?
F6	Subsidies
	<ul style="list-style-type: none"> What type of subsidy did you receive ; financial, materials, labour, anything else? Where did the subsidy come from? When did you get it? Are there any subsidies being offered now? What are they?

F7	Affordability/Cost
	<ul style="list-style-type: none"> How much did your latrine cost to build? How did you finance it? Did you have to borrow money to do it? How much does it cost to maintain (clean and repair) your latrine? Is that affordable? Can you afford to maintain your latrine? Could you afford to re-build it if it collapsed or the pit filled up? Did the availability or lack of credit for toilets influence you? What credit facilities are available in your area? Did you get a loan to build your latrine? Have you repaid it? Is it easy to get a loan? Could everyone in the village get one? <p>What do you need to do to get the loan?</p>
F8	Support from others in the community with construction, maintenance or repair
	<ul style="list-style-type: none"> Did support from other people in your community help/encourage you to build and maintain your toilet? Who organised the support; was it formal or informal? What support were you given (describe).

De-motivating Factors

WHY DID YOU STOP USING AND MAINTAINING YOUR LATRINE?

DM1	Inconvenience & lack of comfort or privacy
<ul style="list-style-type: none"> Did lack of comfort and convenience drive you to abandon your latrine and return to OD? Explain. Did the closeness of the bush make OD easier? Is it more comfortable to use the bush rather than a latrine? Explain Is it more private to use the bush than the latrine? Explain 	
DM2	Location too far away or hard to reach
<ul style="list-style-type: none"> You said the toilet was too far away – was that a problem at night or when it was raining? 	
DM3	Fear of harm - slab collapsing, falling in
<ul style="list-style-type: none"> What is your fear? Is the whole household scared or just the children and elderly? What features of the latrine make you feel unsafe? 	
DM4	Regular cleaning too much effort and very smelly latrine
<ul style="list-style-type: none"> Who was mostly responsible for cleaning the latrine? How often was it cleaned? Was it smelly? Did you need any special materials for keeping it clean? 	
DM5	Maintenance-repairs and pit emptying too difficult/costly
<ul style="list-style-type: none"> Did your latrine break down or did the pit fill up? Did you try to repair it? What sorts of repair? What prevented you from carrying out repairs? Is there a service for pit emptying available? How much does it cost? 	
DM6	Unaffordable & lack of credit to rebuild
<ul style="list-style-type: none"> How much did it cost to build your latrine? How much to re-build or maintain? Where did you get the money in the first place? 	
DM7	Shared with others
<ul style="list-style-type: none"> Did sharing the toilet with other HHs discourage you from maintaining your latrine? Explain. How many HHs? Who looked after the latrine? How was this responsibility shared? 	
DM8	Cultural, religious, moral beliefs
<ul style="list-style-type: none"> What are the cultural reasons why you cannot use a latrine? Does your religion (or religious leaders) tell you not to use a latrine? Explain. 	
DM9	No more support

- What lack of support has made it difficult for you to maintain and rebuild your latrine?

DM10 Peer pressure/being like others

- Are there others in your village/neighbourhood who have returned to OD also?
- Do you identify/agree with these people more than those who still have a latrine?
- What form of community pressure made you stop building and using latrines?

De-Enabling Factors

WHAT HAS MADE IT HARD TO RE-BUILD OR MAINTAIN YOUR LATRINE?

DF1	Local soil and ground conditions
<ul style="list-style-type: none"> Describe the ground conditions which made rebuilding the latrine difficult? <ul style="list-style-type: none"> – sandy soil - making the pit collapse? – rocky – making it difficult to dig? – high water table – making the pit collapse? – area prone to flooding? How have these conditions discouraged you from rebuilding? 	
DF2	Availability of land, materials, labour
<ul style="list-style-type: none"> What difficulties have you faced in getting the following to rebuild the latrine - <ul style="list-style-type: none"> – Land? – Materials – what materials? how acquired? What did they cost? – Labour – who built? How much did it cost? Has lack of space prevented you from moving/ rebuilding your latrine? Explain. 	
DF3	Availability of water
<ul style="list-style-type: none"> Explain how lack of water has blocked you from rebuilding the latrine. What is the problem in accessing enough water? 	
DF4	Quality of initial construction
<ul style="list-style-type: none"> Was the quality of the latrine you built good, fair or poor? If the quality was poor, how has this affected people's use and maintenance of the latrine? Why was the construction quality good or bad; who constructed it? 	
DF5	Technical Advice or Knowledge
<ul style="list-style-type: none"> Who advised you on how to build your latrine? Someone from in the village or outside the village? What advice did you receive? Have you been able to access this advice for rebuilding your latrine? If not, explain. 	

ANNEX D – PHASE 2 ENUMERATOR GUIDE

PLAN INTERNATIONAL ODF SUSTAINABILITY STUDY Community Research Team Guide



Introduction

This manual is to guide you in conducting research on ODF sustainability – why some communities after ODF declaration continue to use and maintain their latrines (and how they do it), and why some communities lapse – go back to shitting in the bush.

The picture shows a team of only 5 team members, but in fact there are 7 members in your Community Research Team (CRT) – three men and three women, plus the team leader. You will plan and carry out this work as a team, guided by the team leader.

This guide will help you:

- ❖ **Understand the CLTS approach and the overall purpose of the research**
- ❖ **Plan and prepare for the village research**
- ❖ **Organise the initial community meeting in each village**
- ❖ **Facilitate the household interviews and focus groups**
- ❖ **Ensure active participation by women in the household interviews**
- ❖ **Record the information collected in a systematic way**

What is CLTS?

Community Led Total Sanitation (CLTS) is a participatory process to get the whole community working together to improve sanitation. At a triggering meeting community members come together to discuss the problem of **open defecation (OD)** – people shitting in the bush - and decide what they want to do about it. Through discussion community members realise that open defecation is disgusting, and dangerous. The breakthrough or ‘trigger’ for stopping open defecation is people’s realisation that:

They are eating their own and their neighbours' shit!

Once they realize that OD is disgusting, the community decides to stop open defecation and to build and use latrines and hand washing facilities - and through this achieve **Open Defecation Free (ODF)** status. Each household builds a latrine and hand washing facility, using their own resources, and uses both facilities regularly.

CLTS tries to change **the sanitation behaviour of the whole community – the practice of shitting in the bush (OD) - as the main objective, rather than merely constructing latrines.** The idea is to get people committed to changing their behaviour first, before talking about building latrines.

The behaviours promoted by CLTS include:

- ❖ Stopping shitting in the bush
- ❖ Building, maintaining, cleaning, repairing, and using latrines
- ❖ Building and using handwashing facilities along with soap (or ash)



CLTS does NOT provide money to build latrines. Instead households are encouraged to build their own latrines, using their own resources. **The aim is to get each household to accept responsibility for financing, building and using their own latrine on an ongoing basis.** If it collapses or fills up, the household is expected to replace it or repair it themselves.

Once a community decides to stop OD, they carry out a number of activities to support this objective –

- ❖ Setting a **deadline** for the building of all latrines and stopping OD
- ❖ **Monitoring** the building of latrines and the continued OD practices
- ❖ Developing **by-laws and fines** to discourage continued OD
- ❖ Providing **support to vulnerable households** e.g. helping to dig pits

They also select '**natural leaders**' – local people who show a lot of initiative on this issue - who can help to lead the process.

Once a community achieves its objective of having all households use latrines and stop OD, this situation is verified and the community is declared ODF in a celebration.

Why Research on ODF Sustainability?

Plan was one of the first organisations to adopt the CLTS approach in Africa. Since 2007, Plan has helped to facilitate the CLTS process in a significant number of villages. Many of these villages have since achieved ODF status.

After 5 years of CLTS implementation Plan would now like to know more about what happens after ODF declaration. Are villages maintaining their ODF status or lapsing back into OD? Are households maintaining and using their latrines, or abandoning or failing to repair their latrines and reverting to shitting in the bush? What encourages or discourages households from maintaining and using latrines on a continuing basis? Plan would like to learn more about these issues and use this learning to strengthen the organisation and impact of its CLTS activities.

Organisation of the Research

The research project is being implemented in four countries where Plan International has conducted CLTS activities – Ethiopia, Kenya, Sierra Leone, and Uganda.

FH Designs, an Australian company, was hired to conduct the research, working in collaboration with the Plan Country Office in each country and teams of researchers hired in each country.

The research is being organised in two phases:

- a) **Phase One:** Re-verifying the ODF status of households. Teams of researchers visited households in the selected districts in the period May to July 2012 and assessed the ODF status of each household.
- b) **Phase Two:** Based on the results from Phase One, teams of researchers will conduct household interviews and focus groups in a sample of communities – 10 villages in each country. This is the task for which you have been hired.

Goal of Phase Two Research

The overall goal of the Phase Two research is to find out **what are the primary causes of households reverting to OD; or their motivation for remaining ODF.**

We have divided these ‘causes’ or factors into two categories:

- a) **Enabling or facilitating factors** – things that make it easier, or difficult for households to maintain, repair, and use their latrines e.g. easily available materials may make it easier to make repairs; sandy soils may cause latrines to collapse;
- b) **Motivational factors** – things that motivate a household to use, maintain or repair their latrine e.g. improved health, convenience or comfort, peer pressure, shame or pride, pressure or support from community leaders, etc.

For households who have reverted to OD, we would like to find out what are the reasons for going back to shitting in the bush – is it lack of commitment to the new behaviours, or because repairs are expensive, or other reasons? In this case the reasons may include a combination of enabling and motivational reasons.



What are your TASKS as a CRT?

Your role will be to conduct the Phase Two Research. Your tasks are to:

- **Establish working relations with village leaders and other leaders** who can help with setting up the household interviews and focus groups
- **Organise a community meeting** to introduce the team and research activities, and ask for their help in arranging for the household interviews and focus groups
- **Conduct interviews** with selected households – usually a husband and wife
- **Facilitate a focus group discussion** with male or female community leaders
- **Ensure that both men and women participate actively** in the household interviews and focus group discussions
- **Record the information collected** on the forms provided
- **Work with the Plan district office** on the logistics to support your work.

By conducting the interviews and focus group discussions you are acting as a "FACILITATOR ". To be a good facilitator, you need to be able to:

- Create a comfortable environment in which everyone feels ready to contribute
- Explain things clearly and simply in the local language
- Ask good questions and encourage people to express their ideas
- Encourage women to be actively involved
- Listen carefully to what people say and rephrase and summarize what is said
- Record what is being said, while at the same managing the discussion

Division of Roles within the Team

Each team will be made up of three pairs, each consisting of **one male and one female researcher**. Each pair will be responsible for conducting eight household interviews in each village. Having a female researcher in each pair will help to encourage the women in each household to contribute actively in the discussion.



In conducting the interview the pair will divide up the tasks in the following way:

- The two team members will alternate in the lead facilitation roles.
- The lead facilitator (A) will ask the questions and keep notes on a special form.
- The other team member (B) will write out and place the cards for the timeline – events and factors – and lead the ranking and weighting process
- A will operate the voice recorder. B will operate the camera.

Two focus groups will be organised in each village – one male and one female.

The male group will be facilitated by the three male team members, the female group by the three female team members.

Roles of the Team Leader

The team leader will be responsible for:

- Organising the identification of households using the GPS machine and assigning pairs to the different household interviews
- Observing the household interviews done by each pair and rotating around the different pairs to ensure they perform at a high standard
- Making a regular/systematic check on the note-taking by each pair
- Chairing the daily review meeting of the three pairs at the end of each day
- Keeping track of the data (e.g. interview and focus group notes, downloading photos and voice recorder interviews, etc)
- Taking over for a team member who is sick – or having a day off.

Planning

Your team will work in ten communities over a period of roughly 6-7 weeks. This work will need to be carefully planned so that:

- **You** have enough time to complete your work in a satisfactory way
- **Communities** know when you will visit so they can be prepared
- **District Plan Office** knows your schedule so they can support your work.

Your work in each community will look something like this:

Day	Pair A (male/female)	Pair B (male/female)	Pair C (male/female)	Total HH Interviews
Day 1	Community Meeting organised by the whole team			
	2 HH interviews	2 HH interviews	2 HH interviews	6
Day 2	Village Leader Focus Groups – 1 male and 1 female FG			
	2 HH interviews	2 HH interviews	2 HH interviews	6
Day 3	4 HH interviews	4 HH interviews	4 HH interviews	12
Total				24

In three days you should be able to achieve the target number of activities planned for each village – 1 community meeting, 2 focus groups, and 24 household interviews.

In planning your work in the villages you will also need to take into account:

- **Number of villages to be covered** and transport requirements
- The need for **advance information** to be communicated to villages
- **Different types of activities** to be done in each village – community meeting, household interviews, and focus groups
- **Number of 90 minute household interviews** which can be done in a single day
- **Time for report writing:** You also need to allow time to finalise your notes on each interview and focus group, and add the coding for enabling and motivating factors.
- **Unforeseen events e.g. funerals.** You cannot predict funerals or any emergencies, but you know they will come - so allow time for postponed meetings.

Advance Information on each Village

The Plan Office will provide the following information in advance, which will help with the planning and organisation of the research:

- Baseline data on household latrines before the start up of CLTS – prior to triggering exercises in villages
- Dates on triggering, ODF declaration, and other key activities
- Information on post-declaration support activities e.g. sanitation marketing, artisan training, follow-up monitoring visits, etc
- Key contacts in each village e.g. village head, names of natural leaders
- People who can help the team identify specific types of households in the village (e.g. ODF lapsing households and female headed households.)

Advance Information to Communities

The District Plan Office, and in some cases the team leader, will visit each target village in advance of the team visits to brief the community on the research activities and help to set up the community meeting.

Community Meeting

Your first activity in each community will be to organise a community meeting. This meeting will be used to:

- a) Introduce yourself, build rapport, and brief the community about the research program
- b) Ask for village leaders' permission and support for working in the community
- c) Inform the community about the households to be visited and agree on meeting times
- d) Select those to attend the Village Leaders' Focus Groups and arrange a meeting time and venue
- e) Collect context based data on community
- f) Deal with questions, concerns, clarification



In briefing the community you should explain that the objective of the research is to **find out all of the things that have happened in the village related to continuing ODF practices and reasons for them** - from the triggering meeting until the present.

You should also explain that you want to:

- **Hold interviews with individual households** and hear from men and women in each sampled household
- **Meet with different types of households**, including those who have done well with their latrines, and those who have had problems, and different vulnerable households (female headed, child headed, disability, HIV affected, etc)
- **Hold focus group meetings** with selected community leaders in two groups – a male focus group and a female focus group.

In arranging for the two focus group meetings **agree on a time and venue which is convenient for all of those invited**, especially the female members who have many other tasks to do at home and on the farm.

Ask key leaders to inform households and focus group participants about the date and time for household interviews and focus group meetings.

Sampling Framework

The selection of households to be interviewed will be based on data from the re-verification exercise, using a combination of purposive and random sampling. Villages will be classified according to the number of households that have reverted to open defecation, and three distinct village types will be included:

1. Villages where nearly all households are still using a toilet—**STRONGLY ODF VILLAGES**. The households will be chosen randomly, excluding those households that have reverted to open defecation
2. Villages that have a high number of household returning to OD—**WEAKLY ODF VILLAGES**. Households will be chosen randomly from the OD households in these villages.
3. In between villages, where some households have returned to OD—**MEDIUM ODF VILLAGES**. In these villages approximately half of the sampled households will be lapsing and half sustaining, and will be chosen randomly from each group.

In each village, **more than 24 households will be identified** to ensure that at least 24 surveys can be completed in every village, even when some households may not be available. The household data collected in the re-verification phase will be used to ensure that female headed households are included in each village and grouping. If the data turns out to be incorrect or the identified female headed households are empty at the time of the village visit, the village leader(s) will be consulted and requested to help with identifying some female headed households to include.

The scope of the study is not large enough to ensure that all vulnerable groups are included in each village. Where vulnerabilities are observed, they will be noted, but the study will not deliberately target households with members with disabilities/HIV/child headed or other vulnerable characteristics.

Household Interviews

Your biggest task as a CRT member is to conduct household interviews – 90 minute discussions with households to **find out more about their experience of adopting (or not adopting) ODF practices and building, maintaining, and using latrines**.

To fit in all the household interviews – **8 interviews per pair over a three day period** – you will need to meet with different households at different times of the day. So let households know you are coming so they can be available.

In each household you will meet one or two adults – husband and wife, and in the case of polygamous households you may meet more than one wife. Since the interviews take place during the day some of the school age children will be away at school, but some of the younger children will be at home.

You may be escorted to the household by a village leader. Thank the person for their help in identifying the household and then say goodbye. **It is important that they do not attend the interview, so that you are alone with the household.**

Keep the interview to 90 minutes. If you take longer, you may lose people's attention. Let the family know at the start of the interview that it will take 90 minutes. Keep their convenience and daily activities in mind.

Vulnerable Households: Please make a note (if you can) of whether the household fits one of the vulnerable household categories such as female or child-headed, very poor or whether there are people with disabilities or living with HIV/AIDS. The form has space for you to record these household characteristics.

Gender

When you sit down with the family, the husband may choose to sit on a chair while his wife sits on a mat on the ground. This is the traditional setup - the husband takes the more powerful position and expects to do most of the talking. If his wife talks, the husband may try to control what she has to say. So it is your job as the facilitator to **guide the discussion so that the wife has a chance to speak, without feeling censored.** This is a tricky but important job for a facilitator!

Women are the most affected by lack of safe latrines and have the most to gain from improved sanitation. They have difficulty finding places to shit in the open without people watching, and can be vulnerable to harassment. They often have a major say in deciding on how to stop open defecation and how to build and use latrines. For example, in many traditions its women who do the cleaning of the latrines, collect water for hand washing, take care of cleaning and dumping children's faeces in the latrines, etc. So their views and experience are important and need to be brought out in the interview.

Women are often left out of the discussion. They sit and listen to the men do all the talking. What can you do to solve this problem?

Here are some techniques:

- **Set clear ground rules** at the start of each interview i.e. the importance of both men and women having a chance to give their views.
- **Show confidence and interest in women's views.** Encourage them to speak, and make sure they are listened to and their views taken seriously.
- **Use standard encouraging techniques** e.g. eye contact and body language, give them your full attention and praise and rephrase what they have to say.

- **Look for opportunities to involve women in the interview** – especially on issues where they are likely to know more e.g. cleaning the latrine, fetching water, teaching children about latrine use, making decisions on technology, etc.
- **Use the weighting process** to get out the different views of husband and wife
- **Get the female member to encourage women to talk.**
- **If the wife keeps saying “I don’t know”, conduct the interview in two groups** – the female interviewer with the wife, the male interviewer with the husband.

Our aim is to create a warm atmosphere that ensures that the husband does not feel he is being undermined as the 'household head', while at the same time making the wife (or wives) feel comfortable to give their views freely and without feeling they are being censored by their husbands.

We would like you to observe or read the power dynamics between husband and wife during the interview and comment on it in the post-interview report writing.

We would also like you to **involve older children in the discussion**, when they are present on the plot. They may have other perspectives which are not being presented by the adults. One eight year old told us during the pilot study that he would feel stigmatized by his peers if he didn’t use latrines - “If you don’t use the latrine, other kids can tease you – you are regarded as a low person”.

Household Interview Agenda

The agenda for interviewing ODF PRACTISING HOUSEHOLDS is as follows:

1. Introductions and ground rules (**5 minutes**)
2. Observing the household latrine (**5 minutes**)
3. Timeline structure – CLTS events and wet and dry seasons (**5 minutes**)
4. HH involvement in CLTS triggering and follow up activities (**5 minutes**)
5. **FIRST LATRINE (20 minutes)**
 - a) Building the first latrine – description (TIMELINE)
 - b) Enablers and barriers – what made it easy, or difficult, to build?
 - c) Motivating factors – what motivated them to build?
6. **AFTER ODF DECLARATION (40 minutes)**
 - a) Experience of maintaining, repairing, replacing, and using latrine (TIMELINE)
 - b) Enablers and barriers – what made it easy/difficult to maintain/repair?
 - c) Motivating factors – what motivated them to use and maintain the latrine?
 - d) Weighting the motivating factors
7. Survey questions (**10 minutes**)

There is also an agenda for interviews with OD HOUSEHOLDS - households which are no longer using the latrine and have gone back to shitting in the bush. The agenda for these interviews will be similar to the above, but have a number of key differences, especially in the “AFTER ODF DECLARATION” section of the interview:

6. AFTER ODF DECLARATION (40 minutes)

- a) Experience since ODF declaration – problems, any repairs, returning to OD
- b) Reasons for failing to maintain the latrine and going back to OD
- c) Weighting the reasons for going back to OD

The two main sections of the interview are the discussions of household experience during two phases – a) constructing the first latrine (#5); and b) after ODF declaration (#6). The first discussion – household experience in building their first latrine – is really a warm-up. **The main focus of the research is the post-ODF declaration phase**, so you will spend more time on this. Our main aim is to find out what happened **after** ODF declaration and why i.e. has the household continued to maintain, repair and use the latrine, or has the household stopped maintaining and using the latrine and reverted to OD? Why?

Latrine Observation

Your first activity in each household will be to observe the latrine (in those households that have one). This will provide data for the research and help you in asking relevant questions during the interview. For example you may observe that the roof or walls are collapsing, or the floor of the latrine is very dirty, or there is no water in the hand washing facility – you can then ask questions about this during the interview.

There is a **checklist of things to be observed in the Household Interview Sheet**, which corresponds to those things observed during the re-verification exercise. By observing these things again, we can cross check with the re-verification data to ensure the data is accurate, or whether there has been any activity between the re-verification exercise and this one.

A number of households that no longer had functioning latrines mentioned in the re-verification exercise that although they had abandoned their latrine, they now use their neighbour's latrine. **In these households you should ask to see the neighbour's latrine (or the latrine they claim to use)**. If they cannot show you the latrine then you should make a note of this, and try and probe during your discussions as to where they really go to shit.

Things to be observed during the HH survey include:

- Type of latrine
- Depth of pit
- Indications of use
- Type of sub- and super structure (pit lining; door, roof and wall materials; slab/floor materials, presence of a hole lid etc)
- Handwashing facilities and indicators that they are used
- Evidence of open defecation

Take a torch with you to check on fresh shit inside the latrine pits.

Timeline

Each interview is built around a **TIMELINE** – an activity which records household sanitation activities at different points in time e.g. finding materials, digging the pit, constructing the slab and superstructure, getting household members to use the latrine, cleaning and maintaining the latrine, experiencing problems (e.g. heavy rains destroying the roof, pits filling up), attempts to repair the latrine, and in the case of ODF lapsing households, stopping use of the latrine and returning to open defecation.

The timeline helps to tell the story of the household's experience with building and using latrines, and stopping open defecation. This story then provides the focus for your main questions – what made things easy or difficult (**FACILITATORS - ENABLERS & BLOCKS**) and what motivated the household (**MOTIVATORS**) to maintain/repair/replace the latrine, and in the case of ODF lapsing households what motivated them to stop using the latrine and return to OD.

The timeline activities are recorded on **YELLOW CARDS** – A4 size cards cut in half. The initial timeline cards - **CLTS KEY EVENTS** (Triggering Meeting, ODF Celebration) and the **SEASONAL CARDS** (wet season, dry season, harvest/boom period) are pre-recorded with symbols. These initial cards are placed on the timeline at the start of this activity – a way of showing different time periods over several years and providing a hook for people's memories. The seasonal cards help people remember events which took place a long time ago e.g. *"My roof collapsed during the floods of 2009"*. When the timeline is finished, take a photo of it as a back up for your written notes.

How do you organise the timeline?

- Step 1: Draw a line on the ground in front of those being interviewed**
- Step 2: Place CLTS EVENT CARDS – Triggering Meeting and ODF Declaration at one end – and the present (NOW) at the other end**
- Step 3: Place SEASONAL CARDS – wet seasons, dry seasons, harvest/boom period from ODF declaration until present – with help from HHs**
- Step 4: Ask household to describe HOW THEY BUILT THE FIRST LATRINE e.g. materials, money, labour, and any problems. Record this information on cards and place on the timeline.**
- Step 5: Facilitate discussion on a) Enablers & Blocks and b) Motivators
- Step 6: Ask HH to describe WHAT HAPPENED SINCE ODF DECLARATION e.g. problems (pit collapsing, termite invasion), repairs, rebuilding. Record each of these activities on cards and place on timeline.**
- Step 6: Facilitate discussion on a) Enablers and Blocks and b) Motivators
- Step 7: Organise weighting of the Motivators

The text above in bold describes the timeline activities.

EXAMPLE TIMELINE

Date	Event
2009	
October	TRIGGERING MEETING – wife attended
November	FIRST LATRINE: Poles & thatching grass 5 km away. Paid Sh5000. 3 days digging – hard to break through rock, paid Sh6000 to help dig 1 day on superstructure – wall of layers of mud bricks, roof – poles into final bricks + thatch. H&W built walls. Husband – roof Slab – logs across pit, plus layer of mud
December	Built Hand Washing Facility - advice from health volunteer.
	Cleaning of latrine and smoking (to remove smell & flies) and re-smearing of floor with cow dung – every 2 weeks by wife
	Everyone uses toilet except 2 yr old. Wife collects shit - dumps in toilet
2010	
Jan-March	DRY SEASON
January	Visit by health workers to check on latrine building
February	ODF CELEBRATION
April-Aug	WET SEASON
May	Heavy rains. Poor soils. Pit collapses.
June	Helping someone with farm work to get money for materials. Use neighbour's latrine – embarrassing
July	RELOCATED LATRINE to area beside ant hill. Rebuilding - son helped with digging and used same materials (poles, thatch, mud).
August	HARVEST
October	Roof blown off during storm.
November	TOILET REPAIR. Replaced poles and thatch. No cost – grass and poles from neighbour
2011	
Jan-March	DRY SEASON
January	Noticed termite problem. Eating poles and thatch
March	Followup visit by health workers – no solutions for termites
April-Aug	WET SEASON
July	Roof collapses - rains and termites. Too busy with farm work to repair.
	Half family use toilet, half family go back to OD
August	HARVEST
September	Visit another house. Impressed by quality of latrine. Decide to copy.
September	Sell crops. Use money to buy poles and galvanised steel for roof
2012	
Jan-March	DRY SEASON
March	Followup visit by health workers
April-Aug	WET SEASON
NOW	

Enablers/Barriers and Motivators

During the timeline activities (described above) the household will explain what happened during two phases –

- a) The pre-ODF declaration period when they built their first latrine, and
- b) The post-ODF declaration period when they organised maintenance, responded to problems, repaired the latrine, or in some cases reverted to OD.

After they have given these descriptions, your job is to ask questions about the ENABLERS/BARRIERS and MOTIVATORS. This is the most important part of the household interview. Your aim is to get the household to analyse:

- What made the latrine building (or maintenance/repair) **easy or difficult**?
- What were their **motivations** in a) building the first latrine and b) maintaining and repairing/replacing and using the latrine?

This is the main discussion so it needs to be detailed. This requires **PROBING SKILLS** so that you get a full discussion on these issues. Your job is to get the household talking about 5-8 key factors – the ones they feel are the most important – and for each one to **ask follow-up or probing questions to get out more detail**.

For example the household may say - *“it was easy to replace the latrine because materials for building were very cheap”*. Your job is then to ask follow-up questions such as: “What materials did you use? Where did you get them? How much did each cost?” Your aim is to draw out enough detail to get a full understanding of the issue.

Using probing questions is very important. It is not enough to accept responses such as “avoid diseases”, or “awareness creation”. Each of these responses needs to be followed up with probing questions so we understand what people really mean in giving these opinions.

The team member doing the interviewing will record this information in the notes. At the same time the second member of the team will **record the motivational factors for the second phase on BLUE CARDS.**



In recording on cards the team member should first look at the FACTOR LIST and use the phrasing for each factor given on this list. For example the household member may say, in response to a question on motivation – *“We built the latrine quickly to avoid being hassled by the village leaders”*. The team member would consult the Factor List and record this motivation as FACTOR M9 (FORCE). The household may say – *“We spent a lot of money going to the clinic to treat our children for diarrhoea, and saw that a toilet would help to prevent these diseases and save us money.”* The team member would record this as FACTOR M7 (HEALTH).

Ranking and Weighting



The household interview (and the focus group) uses techniques called RANKING and WEIGHTING. The aim in using these tools is to get villagers to identify the most influential factors motivating people to continue to maintain and use the latrine.

RANKING and WEIGHTING are also used to get the views of different household members – the views of the husband and the views of the wife separately.

Each MOTIVATIONAL FACTOR is recorded on a single (Blue) card. Once you have generated a number of factor cards, you can organise the ranking and weighting.

RANKING and WEIGHTING is organised in the following way:

- Display the motivational factor cards on the ground **at the side of the house** (away from the meeting space), and arrange for the wife/wives to do the ranking and weighting on their own, and then the husband to do the same process. Having this activity done at the side of the house allows the wife/wives and husband to do this activity on their own, without the other spouse interfering.
- Mix up the cards before people do the ranking or weighting; otherwise they may follow the original order in which the factors appeared.
- If there are too many cards, ask the family or group to remove the less important cards first, before ranking or weighting them. In household interviews families can work with 5-8 main factors; the focus groups can work with 10-12 main factors.
- RANKING: Ask the household member to place the cards in the order of importance – and then a team member records the result.
- WEIGHTING: Provide a pile of 20 stones. Ask participants to place the stones on the factor cards, showing with the number of stones the 'super important' factors. Then record the results.

Some households will understand the issues quickly and be able to give a good explanation about the enablers and motivators without much probing. They may also find the ranking and weighting easy. Other households will require more probing but still end up producing good explanations and weighting results. A few households may have difficulty with the interview no matter how good you are at facilitating or asking probing questions. There is a place on the Household Interview Sheet for you to record how hard or easy the household found the interview process. You should make your own judgement of this at the end of the interview but you do not have to share your rating with the household.

Household Survey Questions

The last step in the household interview is to ask a number of survey questions, which are recorded in the Household Interview Sheet.

The aim of asking these questions is to provide some extra information to help explain some of the responses to the discussion on Enablers and Motivators.

Interviewing Techniques

- **Introduce team members and the purpose** of the interview at the start.
- **Get verbal informed consent** from the household before starting – and ask permission to tape-record the session. Assure the household that all information will be kept confidential.
- **Keep eye contact with respondents.** Show interest and be patient by using expressions like “I see” or “That’s interesting.”
- **Don’t be judgmental.** Don’t show by your expression or body language that you disapprove of what they are saying, or condemn their sanitation practices. Remember - there are no right or wrong answers and we are not there to “correct” the information they are giving us. We are there to get their perspectives on different issues.
- **Don’t interrupt a respondent.** Wait until the person is finished talking and then ask the needed probing question, or move on to the next question.
- **If an individual offers an important lead - even if it is not planned - follow it.** For example, if a woman is talking about rebuilding their latrine and mentions that when it collapsed, they were forced to use the neighbour’s latrine, find an opportunity to ask about their experience of using the neighbour’s latrine.
- Because some issues (e.g. shitting in the bush) are sensitive, some people may remain silent, and you may have to try different ways of introducing the same topic - be creative and ask in another way.
- Avoid using technical terms. Instead, use simple, local language.
- At the end of the interview thank the husband and wife for their time and important contribution to the study. Answer any questions they may have at this point
- Check that the cards and your notes are labelled correctly and that you have all your materials with you before leaving the household.



Focus Groups



The team will organise two focus groups in each village – one with male village leaders (facilitated by the male team members) and one with female village leaders (facilitated by the female team members).

During the community meeting explain who should be invited to each focus group. The aim is to get a **mixed group of different types of community leaders**, e.g. chiefs, councillors, VDC representatives, teachers, extension workers, health volunteers, members of different community groups, and natural leaders.

When we tried out this process during the pilot, the village leaders organised a focus group of 9 village health volunteers and 2 village leaders. This group were largely members of a single cadre (rather than a mixed group of community leaders) – they had similar ideas and were the main implementers of the CLTS programme, so they had an interest in presenting a positive view about its achievements, rather than a more objective view.

So – ensure that you get the right mix of people¹ coming to the focus group meeting by explaining this carefully to village leaders.

Keep the focus group to 8-12 people. Any number larger than this will be unmanageable and result in poor quality information.

Limit the focus group meeting to two hours. If you take longer, you may lose people, who have other commitments. Let people know at the start of the meeting how long the focus group meeting will take.

Be strategic about the time taken for each part of the focus group so that most of your time is spent on finding out more about the post-ODF Declaration period.

¹ An example of mix: village leader, woman rep of local council, religious leader, an elder, teacher, well known artisan/builder/mason, VHT, opinion leaders, etc.

Ask for a meeting place for the focus group meeting. All you need is 12 chairs or four benches sitting under a tree. The location should afford privacy for the discussion. Participants will not speak freely if other people are listening to their discussion

Focus Group Agenda

The agenda for focus groups in ODF PRACTISING VILLAGES is as follows:

1. Introductions and ground rules (**5 minutes**)
2. Timeline structure – CLTS events and wet & dry seasons (**5 minutes**)
3. **FIRST PHASE – TRIGGERING TO ODF DECLARATION (20 minutes)**
 - a) Activities to promote latrine construction – description (TIMELINE)
 - b) Enablers and barriers – what made it easy, or difficult, to build?
 - c) Motivating factors – what motivated villagers to build latrines?
4. **SECOND PHASE - ODF DECLARATION UNTIL NOW (60 minutes)**
 - a) Activities to support ongoing maintenance/repair/use of latrines (TIMELINE)
 - b) Motivating factors – what motivated people to use & maintain their latrines?
 - c) Ranking and weighting of motivating factors
5. Survey questions (**10 minutes**)

There is also an agenda for focus groups in WEAK ODF VILLAGES. The agenda for these interviews will be similar to the above, but have a number of key differences, especially in the “AFTER ODF DECLARATION” section of the interview:

4. **SECOND PHASE - ODF DECLARATION UNTIL NOW (60 minutes)**
 - a) Events since ODF declaration – problems, households returning to OD
 - b) Reasons why HHs have stopped using latrines and gone back to OD – individual reasons and community factors
 - c) Ranking and weighting the reasons for going back to OD

Finally, you will also visit some of the MEDIUM ODF VILLAGES. For these villages you will need to ask about both why some households remained ODF and some returned to OD. This will take a bit longer than for the STRONG and WEAK villages:

4. **SECOND PHASE - ODF DECLARATION UNTIL NOW (60 minutes)**
 - a) Activities to support ongoing maintenance/repair/use of latrines (TIMELINE)
 - b) Motivating factors – what motivated people to use & maintain their latrines?
 - c) Ranking and weighting of motivating factors
 - d) Events since ODF declaration – problems, households returning to OD
 - e) Reasons why HHs have stopped using latrines and gone back to OD – individual reasons and community factors
 - f) Ranking and weighting the reasons for going back to OD

Remember to take a photo of the timeline for each focus group as a back up for your written notes.

The agenda for the focus group is different than the agenda for the household interview. The household interview focuses on the sanitation experience of individual households. The focus group tries to get a **community wide perspective** – what is happening at the community level which has an impact on the sanitation practices of individual households. You are trying to find out what is the collective experience of the whole community **in staying ODF (or reverting to OD)**. You are not collecting data on individual experiences. So your questions should focus on what has happened in general, and not, “what you did,” or “what so and so did.”



During the focus groups we suggest you use **BUZZ GROUPS** – groups of two people sitting beside each other – to get the discussion going at the start and ensure that everyone is contributing. Ask a question and get everyone to turn to the person beside him/her and discuss it. Then after a few minutes get each buzz group to report back, getting the groups to mention fresh points (not already mentioned).

Buzz groups help to get everyone talking; and different buzz groups will come up with different ideas and then they can be shared. Once you have a list of points out, you can ask probing questions to get more detail on some points and make things clearer.

Ranking and Weighting (Focus Groups)

If the focus group is large (over ten members), split the group into two sub-groups for ranking and weighting. Divide into sub-groups of equal numbers, give each sub-group the list of factors (you will need to write out a second set of factors), explain the ranking and weighting task, and then leave them on their own to do the ranking and weighting. Provide a pile of stones for the weighting.

You may need to intervene if you find one or two powerful leaders dominating this process. During the pilot one leader grabbed a bunch of stones and dumped them on one of the factors, without consulting the other members. We had to intervene and ask the group to take more time and involve everyone in the decision.

Focus Group Techniques

- **At the start welcome people to the meeting** and set a warm, friendly tone. When people feel comfortable and accepted, they will participate actively. You may even use a warm-up activity (song or short game) at the start to break the ice.
- **Introduce yourself and ask participants to introduce themselves** along with their organisations.
- **Explain the purpose** of the focus group meeting.
- **Explain the ground rules:**
 - Only one person speaks at a time.
 - Encourage everyone to contribute their ideas.
 - Let people finish what they are saying – don't interrupt.
 - Everyone's opinion is equally important
 - There are no right or wrong answers.
 - It is ok to disagree with one another, but we should respect each other.
- **Explain why you are tape-recording the session.**
- **Give everyone who wants to speak a chance.** Let participants know that their ideas are important. Encourage the quiet ones to speak - and don't let one or two participants do all the talking. One technique to get everyone to contribute is to go around the circle asking each person what he thinks.
- **Listen.....and encourage members to listen** and respect each other's ideas. Repeat ideas where necessary to ensure that everyone has heard.
- **Try to bring out different views** – everyone in the group doesn't think alike, but some people are more shy than others, and do not talk. Encourage everyone to say something. The buzz groups are a good way to get everyone talking.
- **Don't accept one person's opinion as the opinion of the whole group.** Make sure to say – *"What do others think?"*
- **Use probing questions to get out more detail and help understand the issues.** Say things like - *"Can you explain a bit more about what you mean?"* *"Could you give an example of what you mean?"*
- **Reality Testing:** Sometimes people make up stories when they see we are looking for examples of positive or negative sanitation behaviour. For example someone might say that people have stopped using latrines because of cultural reasons. When this happens, probe to get examples of the relevant taboos or traditions, and then ask, *"Does this really happen? Is this the real root cause of OD behaviour?"*



Recording



Your notes on the interviews and focus groups are crucial for our research. So take care in taking notes and organising the note-taking so that all of your hard work is captured in the notes.

We have five main forms of recording/reporting:

- a) **NOTES OF THE INTERVIEWS AND FOCUS GROUPS**, which are recorded on the Household Interview Sheet or the Focus Group Recording Sheet. Each form is a two column table, with the first column for the coding of the factor, the second column for the detailed response – title of factor and the detailed responses to the probing questions. An example is given below and a more detailed example is given in the Attachment “**Example Factor Recording**”.

M2	Wanting to be like others Latrine at father’s house before he got married. When we got married and moved to this village, he wanted a latrine like his father’s.
M3	Convenience/Comfort Wife: “Shitting in the open is shameful for women.” (M6) Wife: After eating you have to shit and it is uncomfortable if no place to shit. The place is open – no place to hide and shit, everyone can see you so you need a latrine

- b) **SURVEY QUESTIONNAIRE**, which is completed at the end of the household interview and at the end of each focus group. The responses to this questionnaire can be completed right on the Household Interview Sheet.
- c) **RANKING AND WEIGHTING**. This information is also recorded on the Household Interview Sheet. After you have done the ranking and weighting, record the results directly onto the cards. Then collect the cards and tape them as a package to help you with documenting this activity on the Household Interview Sheet.
- d) **TAPE RECORDING**. We would like you to tape each of the interviews or focus groups. This information can help you in finalising your report on each activity. Keep a record of the following: date, location, type of participants (household or focus group), starting time and ending time. You should make sure that the householders are fully informed about the tape recording before you turn it on.
- e) **COMMENTS ON THE INTERVIEW (OR FOCUS GROUP)**: At the end of the interview or focus group complete the form at the end of the Household (or Focus Group) Interview Sheet, which asks you for overall comments. Record your

observations of how the interview (or focus group) went and what worked/didn't work. You can also record the household or group dynamics e.g. "the husband dominated the discussion and made it very difficult for his wife to talk"; or "the wife left the meeting for 30 minutes and then returned"; or "the group was very uncomfortable with topic X and didn't say much on it".

Comments on Interview – Example

The session seemed to go well. Husband dominated at first but we managed to get him to allow his wife to contribute equally. She might have talked more if we talked to her on her own. Two young boys observed the meeting but they were very shy and we found it difficult to get them to talk.

We found it difficult to get the family to talk about why they had gone back to OD. They seemed very embarrassed about this and gave us very short responses.

Materials and Equipment

Each team will be given the following materials and equipment:

Printed Material

- ✓ Community Research Team Guide (one for each team member)
- ✓ Household Interview Guides – ODF Practising Household, ODF Lapsing Household
- ✓ Focus Group Guides – ODF Practising Village, Weak ODF Village, and Medium ODF village
- ✓ Factor Lists – Motivating Factors, Facilitating Factors, De-Motivating Factors, De-Facilitating Factors
- ✓ Household Interview Sheet
- ✓ Focus Group Recording Sheet
- ✓ Timeline Symbol Cards – Triggering Meeting, ODF Celebration, rainy season, etc

Other Materials

- ✓ Cards – half sheets of blue and yellow A4 size card – manila sheet type
- ✓ Markers (black, blue, red)
- ✓ Masking tape
- ✓ Pens

Equipment

- ✓ GPS Machine with instructions on how to use
- ✓ Voice recorder
- ✓ Camera
- ✓ Torch (to check for fresh shit inside latrine pits)

Ensure that the voice recorder is working and that you have enough batteries. Test the recorder to ensure it is recording.

Debriefing Session

The team should meet at the end of each day (or the start of the next day) to review the day's work and plan for the following day. Meeting as a group will help you to share what lines of questioning and strategies are working well and how to get around those that don't work well. This way you will learn from each other and your techniques will get better, and you can help each other with any problems that arise.



Ask each pair to quickly present the highlights of their work e.g. household description, key information discovered, good questions, any problems, etc. Then discuss how to solve the problems, and plan for the next day.

The following questions can be used as a guide.

- Have we completed all the planned interviews and focus groups?
- What were the major successes? What were the problems?
- Which lines of questioning and strategies worked well during the interviews and focus groups? Which didn't?
 - What topics did respondents have difficulty talking about?
 - How does this information contribute to the objectives of the research?
 - What other information needs to be collected?
 - What information needs to be clarified?



Working with the Community

Finally - here are a few tips on how to work with the community and do effective facilitation

- ✓ Wear simple clothing so people don't feel that there is a great distance between you and them.
- ✓ Find out who is important in the community, and who can help with contacts.
- ✓ Keep an eye out for any problems or situations where community members may be offended or

uncooperative; share these with the team and resolve.

- ✓ Develop informal relations with community members so that they see you as a friend and not just an outsider.
- ✓ Don't be late and don't keep people waiting - respect that people are busy and thank them for their time at the end of the interviews and focus groups.
- ✓ Address the questions community members ask you in a courteous manner.
 - ◆ If asked while conducting an activity, wait till the end to answer.
 - ◆ If you don't know the answer, tell them that you will check and get back to them - and do so.
- ✓ Many topics are sensitive and personal; make sure you maintain confidentiality, especially when it involves an individual rather than a group - don't name names.
- ✓ Keep your eyes and ears open - listen to what community members have to say even when not formally conducting an interview or focus group.

Issues about Compensation

- ✓ You may be asked by community members what they will gain from cooperating with you. Tell them that there is no compensation. The benefit from the activity is that Plan International, local government, and community leaders will learn from the research and be able to provide stronger support for improved sanitation.
- ✓ For those who participate in the focus group, it would be a good idea to organise refreshments at the end.

Facilitation Techniques

As a facilitator you need to be good at facilitating discussion. Here are a few tips:

Open Questions and Probing

- ✓ One of your main tasks as a facilitator is to ask effective questions:
 - a) Open questions encourage many different opinions and help get all participants talking and contributing.
 - b) Probing is asking more questions to encourage participants to give more information on an issue, or find out the views of other people.

Active Listening



- ✓ After asking each question, listen carefully to what each person says. Give him/her your full attention and concentrate on what she/he is saying.
- ✓ If you listen actively, participants will know that they are being heard and understood. This encourages them to be more open about sharing their experiences and thoughts.

✓ Active listening involves:

- a) Eye contact – looking at the person most of the time to show interest and understanding.
- b) Encouragers – Signals to the other person that you are listening, e.g., nodding your head, saying things like “Yes. ... Okay....I see....That’s interesting.....Tell me more....”
- c) Rephrasing to check that you have understood what the person is saying.

Rephrasing

- ✓ Rephrasing is summarizing what someone has said in your own words, for instance: “*What I heard you say is that you decided to build the toilet because*”
- ✓ The aim of rephrasing is to show the speaker you value what she/he has said, to help clarify it, and to help others add on their own ideas.
- ✓ Rephrasing helps to ensure that you and the group have heard correctly what the person said. It also helps the recorder – it gives him/her a clear summary of what was said in a few words.

Encouraging Participation

In some household interviews or focus groups you will find a few participants dominating. Look for ways to get others involved and the talkers to talk less:

- ✓ Use the ground rules as the basis for encouraging everyone to contribute.
- ✓ Thank the big talker for his contribution and say, “We would like to hear from everyone.”
- ✓ Ask questions to those who are silent and praise their responses. This will encourage them to talk.
- ✓ Divide into pairs (buzz groups) to get everyone talking.
- ✓ Go round the circle getting one point from each person.

A good Facilitator asks GOOD QUESTIONS

Choosing the right question will improve your work as a facilitator. Here is a guide to different types of questions and how they are used:

OPEN QUESTIONS get people to give their own opinions, rather than “yes/no” or single response. Example: “*What makes it easier to build latrines?*” Or “*What motivated you to build a latrine?*” These questions trigger many responses from participants and facilitate open discussion. The idea is to get many responses and many people talking.

CLOSED QUESTIONS get people to give a specific, short answer or “Yes/No”. Example: “*What materials did you collect to build your latrine? How much did they*

cost?" These questions get a single and specific response. Probing questions are often closed questions – you are asking for specific information.

REPHRASING is to restate what a person says in your own words - for example "*You said that local materials – poles and thatch – did not cost any money and this made it easier to build your latrine.*" This helps to clarify what the person has said. It allows the speaker to say, "*No, that's not what I said.*" If rephrasing is used in a focus group discussion, it helps other participants build on what has been said already.

PROBING is to ask follow-up questions to get more information and clarify an issue. Probing questions are like: "*Can you explain more. Can you give me an example.*"

Some facilitators ask only one question – and then move to the next question without any follow up probing. One question is not enough – you need to ask many questions to understand an issue. So practice how to probe and probe and probe until you understand what has been said. Don't be satisfied with one answer.

Probing Techniques

- **Use the 6 helper questions** - What? Where? When? Who? Why? How?
- **Use other probes** - "What do you mean?" "Anything else?" "Tell me more"
- **Don't be satisfied with one answer.** Keep asking questions to get a better understanding of the issue. Invite others to comment or add.
- **Don't include answers in your questions.** For example: "*How are you assisting households, by visiting or helping them dig the pit?*" In this case you are limiting the number of options (visiting and helping with labour). Just ask - "*How are you assisting households?*" and give them a chance to reply.
- **Make it real.** Ask participants to talk about the issue in relation to a real situation - e.g. "If people need Sh 11, 000, exactly how do they get it?"
- **Summarize** at points to help the person who is explaining the situation.

Facilitator: **Why have people stopped using latrines and gone back to shitting in the bush?** **OPEN QUESTION**

Participants: *They are very poor and cannot afford the materials*

Facilitator: **You say people are poor and cannot afford** **REPHRASING**

What are the actual costs of building a latrine? **PROBING**

Participant: *It costs Sh 5000 to buy poles and thatching grass*

Facilitator: **What other the other costs?** **PROBING**

Participant: *Some of us pay for the labour to dig the pit. Sh6000*

Facilitator: **The total cost you have mentioned is Sh11,000** **REPHRASING**
What sources of income to people have? **PROBING**

What Would You Do If ...?



In a focus group meeting members are silent and refuse to answer your questions.

Half way through an interview the wife says she must leave to prepare dinner.

One focus group participant keeps interrupting others when they are speaking.

What the wife says about the family's sanitation practices is totally different from what her husband says.

At the starting time of the focus group only half the participants have arrived.

In the household interview the husband is doing all the talking and the wife is silent.

In a focus group session in the afternoon everyone looks tired and bored.

The wife keeps responding "I don't know" each time you ask her a question.

The household refuses to be interviewed.

The toilet is very dirty and there is lots of shit outside the toilet.

ANNEX E – RE-VERIFICATION DATA USED FOR PHASE 2 VILLAGE SELECTION

Village No	Country	PU	Village Name	Village Type	#HHs	#HHs with latrines	#HHs without latrines	%age slippage	#Female headed HHs	%age Female headed HHs	#Female Headed HHs Selected	#ODF HHs Selected	#OD HHs Selected	OD HHs	%age OD
1	Ethiopia	Jimma	Agelo	Weak ODF	22	14	8	36%	4	18%	4	14	8	4	18%
2	Ethiopia	Jimma	Odoro	Weak ODF	95	56	39	41%	16	17%	7	0	24	38	40%
3	Ethiopia	Jimma	Deru	Weak ODF	29	20	9	31%	3	10%	3	15	9	8	28%
4	Ethiopia	Jimma	Jewaro	Medium ODF	27	22	5	19%	0	0%	0	19	5	5	19%
5	Ethiopia	Jimma	Mensuri	Medium ODF	29	24	5	17%	0	0%	0	19	5	5	17%
6	Ethiopia	Jimma	Bore		6	5	1	17%	3	50%	0	0	0	1	17%
7	Ethiopia	Jimma	Egu	Medium ODF	31	27	4	13%	2	6%	2	18	4	4	13%
8	Ethiopia	Jimma	Besase	Medium ODF	32	28	4	13%	5	16%	5	20	4	4	13%
9	Ethiopia	Jimma	Daydi		32	31	1	3%	4	13%	0	0	0	1	3%
10	Ethiopia	Jimma	Gijabi		26	23	3	12%	0	0%	0	0	0	3	12%
11	Ethiopia	Jimma	Gawisa		27	25	2	7%	5	19%	0	0	0	2	7%
12	Ethiopia	Jimma	Bonoya		42	39	3	7%	2	5%	0	0	0	3	7%
13	Ethiopia	Jimma	Gejo		38	35	3	8%	4	11%	0	0	0	2	5%
14	Ethiopia	Jimma	Boru		45	44	1	2%	5	11%	0	0	0	2	4%
15	Ethiopia	Jimma	Agalo		43	42	1	2%	4	9%	0	0	0	1	2%
16	Ethiopia	Jimma	Alga		34	34	0	0%	2	6%	0	0	0	0	0%
17	Ethiopia	Jimma	Beriso		30	30	0	0%	0	0%	0	0	0	0	0%
18	Ethiopia	Jimma	Yebo		28	28	0	0%	3	11%	0	0	0	0	0%
19	Ethiopia	Jimma	Abeyi		25	25	0	0%	1	4%	0	0	0	0	0%
20	Ethiopia	Jimma	Arfeti		31	31	0	0%	5	16%	0	0	0	0	0%
21	Ethiopia	Jimma	Gomoto	Practicing ODF	35	35	0	0%	6	17%	4	24	0	0	0%
22	Ethiopia	Jimma	Bonaya		8	8	0	0%	0	0%	0	0	0	0	0%
23	Ethiopia	Jimma	Digo	Practicing ODF	29	29	0	0%	1	3%	1	24	0	0	0%

ANNEX E – RE-VERIFICATION DATA USED FOR PHASE 2 VILLAGE SELECTION

24	Ethiopia	Jimma	Loga	Practicing ODF	30	30	0	0%	1	3%	1	24	0	0	0%
25	Ethiopia	Jimma	Ganji		28	28	0	0%	1	4%	0	0	0	0	0%
26	Ethiopia	Shebedino	Gedmo		2	1	1	50%	0	0%	0	0	0	1	50%
27	Ethiopia	Shebedino	Huwo	Weak ODF	29	20	9	31%	1	3%	1	15	9	9	31%
28	Ethiopia	Shebedino	Mamota	Weak ODF	31	21	10	32%	4	13%	3	14	10	10	32%
29	Ethiopia	Shebedino	Chamamo	Weak ODF	26	18	8	31%	0	0%	0	18	7	8	31%
30	Ethiopia	Shebedino	Wetcha		11	8	3	27%	0	0%	0	0	0	3	27%
31	Ethiopia	Shebedino	Bunguda	Medium ODF	32	24	8	25%	2	6%	2	16	8	8	25%
32	Ethiopia	Shebedino	Beguda	Medium ODF	33	27	6	18%	2	6%	2	18	6	6	18%
33	Ethiopia	Shebedino	Burketo	Medium ODF	40	34	6	15%	3	8%	2	18	6	6	15%
34	Ethiopia	Shebedino	Gancho		20	17	3	15%	2	10%	0	0	0	2	10%
35	Ethiopia	Shebedino	Shemeta No. 2		31	28	3	10%	4	13%	0	0	0	3	10%
36	Ethiopia	Shebedino	Adugna		12	11	1	8%	0	0%	0	0	0	1	8%
37	Ethiopia	Shebedino	Hiyo		36	33	3	8%	7	19%	0	0	0	2	6%
38	Ethiopia	Shebedino	Warka		39	36	3	8%	5	13%	0	0	0	3	8%
39	Ethiopia	Shebedino	Kentra	Practicing ODF	58	54	4	7%	4	7%	2	20	4	1	2%
40	Ethiopia	Shebedino	Genet		35	33	2	6%	4	11%	0	0	0	1	3%
41	Ethiopia	Shebedino	Shankase nie		22	21	1	5%	2	9%	0	0	0	1	5%
42	Ethiopia	Shebedino	Degassa		96	92	4	4%	3	3%	0	0	0	1	1%
43	Ethiopia	Shebedino	Dekerie		29	28	1	3%	4	14%	0	0	0	1	3%
44	Ethiopia	Shebedino	Burutukan		38	37	1	3%	3	8%	0	0	0	1	3%
45	Ethiopia	Shebedino	Awkado		38	37	1	3%	0	0%	0	0	0	0	0%
46	Ethiopia	Shebedino	Shemeta No. 1		29	29	0	0%	6	21%	0	0	0	0	0%
47	Ethiopia	Shebedino	Sadamo		37	37	0	0%	5	14%	0	0	0	0	0%
48	Ethiopia	Shebedino	Buna		8	8	0	0%	0	0%	0	0	0	0	0%
49	Ethiopia	Shebedino	Boro	Practicing ODF	36	36	0	0%	9	25%	5	24	0	0	0%
50	Ethiopia	Shebedino	Shelonkat o No.1	Practicing ODF	32	32	0	0%	3	9%	3	24	0	0	0%

ANNEX E – RE-VERIFICATION DATA USED FOR PHASE 2 VILLAGE SELECTION

51	Ethiopia	Shebedino	Shelonkato No.2		28	28	0	0%	3	11%	0	0	0	0	0%
52	Ethiopia	Shebedino	Shulula		24	24	0	0%	3	13%	0	0	0	0	0%
53	Ethiopia	Shebedino	Dora		1	1	0	0%	0	0%	0	0	0	0	0%
54	Ethiopia	Shebedino	Lago		28	28	0	0%	1	4%	0	0	0	0	0%
55	Ethiopia	Shebedino	Anbosa No.1		24	24	0	0%	3	13%	0	0	0	0	0%
56	Ethiopia	Shebedino	Anbosa No.2		27	27	0	0%	1	4%	0	0	0	0	0%
57	Ethiopia	Shebedino	Chafe	Practicing ODF	43	43	0	0%	7	16%	4	24	0	0	0%
58	Kenya	Kilifi	Jaribuni	Weak ODF	51	22	29	57%	16	31%	5	0	23	3	6%
59	Kenya	Kilifi	Katsemeri ni	Weak ODF	38	20	18	47%	10	26%	9	7	17	17	45%
60	Kenya	Kilifi	Ova Ova		32	27	5	16%	5	16%	0	0	0	5	16%
61	Kenya	Kilifi	Umoja Ni Nguvu	Medium ODF	36	31	5	14%	8	22%	5	20	4	7	19%
62	Kenya	Kilifi	Usife Moyo		30	26	4	13%	11	37%	0	0	0	4	13%
63	Kenya	Kilifi	Misufini	Medium ODF	44	40	4	9%	8	18%	4	20	4	3	7%
64	Kenya	Kilifi	Jembe Na Upanga		30	28	2	7%	2	7%	0	0	0	2	7%
65	Kenya	Kilifi	Dzifijirie		48	45	3	6%	9	19%	0	0	0	1	2%
66	Kenya	Kilifi	Ngamani Bale	Practicing ODF	48	45	3	6%	19	40%	7	19	3	2	4%
67	Kenya	Kilifi	Dzimanye	Practicing ODF	35	33	2	6%	13	37%	9	23	1	2	6%
68	Kenya	Homabay	Wang Ochor		28	20	8	29%	7	25%	0	0	0	2	7%
69	Kenya	Homabay	Ndori	Medium ODF	138	99	39	28%	49	36%	9	0	23	9	7%
70	Kenya	Homabay	Rambusi	Medium ODF	34	25	9	26%	11	32%	7	15	9	3	9%
71	Kenya	Homabay	Sakoro		30	22	8	27%	12	40%	0	0	0	0	0%
72	Kenya	Homabay	Oria	Medium ODF	31	23	8	26%	8	26%	6	16	8	0	0%
73	Kenya	Homabay	Kamsure	Medium ODF	34	26	8	24%	14	41%	9	16	8	5	15%
74	Kenya	Homabay	Kangwe		26	20	6	23%	11	42%	0	0	0	0	0%

ANNEX E – RE-VERIFICATION DATA USED FOR PHASE 2 VILLAGE SELECTION

75	Kenya	Homabay	Wagogo	Medium ODF	49	38	11	22%	19	39%	11	13	11	4	8%
76	Kenya	Homabay	Manera	Medium ODF	33	27	6	18%	9	27%	6	18	6	0	0%
77	Kenya	Homabay	Kowuor		19	16	3	16%	6	32%	0	0	0	0	0%
78	Sierra Leone	Moyamba	Gbanguma	Weak ODF	35	22	13	37%	10	29%	9	11	13	0	0%
79	Sierra Leone	Port Loko	Rogbai	Weak ODF	21	14	7	33%	3	14%	3	14	6	1	5%
80	Sierra Leone	Moyamba	Taba	Weak ODF	72	47	25	35%	10	14%	3	0	25	0	0%
81	Sierra Leone	Port Loko	Gbaneh	Weak ODF	30	21	9	30%	4	13%	3	16	9	2	7%
82	Sierra Leone	Port Loko	Kalangba		9	7	2	22%	2	22%	0	0	0	0	0%
83	Sierra Leone	Moyamba	Mokellay	Medium ODF	29	23	6	21%	12	41%	10	18	6	0	0%
84	Sierra Leone	Moyamba	Manjendu	Medium ODF	48	40	8	17%	11	23%	5	16	8	0	0%
85	Sierra Leone	Port Loko	Semibu		18	15	3	17%	5	28%	0	0	0	0	0%
86	Sierra Leone	Moyamba	Solima	Medium ODF	30	24	6	20%	6	20%	4	18	6	0	0%
87	Sierra Leone	Moyamba	Bauya		24	20	4	17%	3	13%	0	0	0	0	0%
88	Sierra Leone	Moyamba	Taninihun	Medium ODF	24	20	4	17%	4	17%	4	20	4	0	0%
89	Sierra Leone	Port Loko	Rosint		25	22	3	12%	1	4%	0	0	0	0	0%
90	Sierra Leone	Moyamba	Ngieya		18	16	2	11%	1	6%	0	0	0	0	0%
91	Sierra Leone	Port Loko	Futha	Practicing ODF	31	29	2	6%	6	19%	5	22	2	0	0%
92	Sierra Leone	Port Loko	Makabu	Practicing ODF	23	22	1	4%	3	13%	3	22	1	1	4%
93	Sierra Leone	Port Loko	Rogberay		10	10	0	0%	0	0%	0	0	0	0	0%
94	Sierra Leone	Port Loko	Masimoh		14	14	0	0%	0	0%	0	0	0	0	0%
95	Sierra Leone	Port Loko	Rolumpa		15	15	0	0%	0	0%	0	0	0	0	0%
96	Sierra Leone	Port Loko	magbapsa		13	13	0	0%	0	0%	0	0	0	0	0%
97	Sierra Leone	Moyamba	Salina		20	20	0	0%	2	10%	0	0	0	0	0%
98	Uganda	Tororo	Kajarau South	Medium ODF	112	98	14	13%	29	26%	6	14	10	0	0%
99	Uganda	Tororo	Atiri D	Weak ODF	119	92	27	23%	18	15%	3	5	18	3	3%
100	Uganda	Tororo	Aputir Central	Weak ODF	123	97	26	21%	32	26%	9	2	21	1	1%

ANNEX E – RE-VERIFICATION DATA USED FOR PHASE 2 VILLAGE SELECTION

101	Uganda	Tororo	Angorom West		103	79	24	23%	30	29%	0	0	0	1	1%
102	Uganda	Tororo	Atiri A		82	66	16	20%	17	21%	0	0	0	4	5%
103	Uganda	Tororo	Kajarau East		100	85	15	15%	16	16%	0	0	0	0	0%
104	Uganda	Tororo	Angorom Central		121	95	26	21%	25	21%	0	0	0	0	0%
105	Uganda	Tororo	Kajarau Central		112	108	4	4%	18	16%	0	0	0	0	0%
106	Uganda	Tororo	Atiri C	Medium ODF	131	113	18	14%	17	13%	4	16	8	2	2%
107	Uganda	Tororo	Aputir West	Medium ODF	75	61	14	19%	17	23%	11	13	12	0	0%
108	Uganda	Tororo	Kajarau North	Medium ODF	85	76	9	11%	14	16%	4	15	9	1	1%
109	Uganda	Tororo	Atiri B	Practicing ODF	132	121	11	8%	19	14%	6	17	7	1	1%
110	Uganda	Tororo	Aputir East		76	64	12	16%	14	18%	0	0	0	0	0%
111	Uganda	Tororo	Akworot C		77	72	5	6%	8	10%	0	0	0	0	0%
112	Uganda	Tororo	Kajarau North East	Medium ODF	70	64	6	9%	13	19%	4	24	0	0	0%
113	Uganda	Tororo	Akworot A	Practicing ODF	105	100	5	5%	25	24%	6	23	1	1	1%
114	Uganda	Tororo	Angorom South		20	18	2	10%	3	15%	0	0	0	0	0%
115	Uganda	Tororo	Angorom East		108	99	9	8%	14	13%	0	0	0	0	0%
116	Uganda	Tororo	Akworot B	Practicing ODF	109	105	4	4%	23	21%	5	24	0	0	0%

ANNEX F – FACTOR COUNTS BY COUNTRY, PROGRAM UNIT AND VILLAGE TYPE

INITIAL FACTORS

Factors	Initial Factors			Ethiopia				Kenya				Uganda		Sierra Leone		Type 1		Type 2		Type 3	
	Totals	OD	ODF	OD	ODF	OD	ODF	OD	ODF	OD	ODF	OD	ODF	OD	ODF	OD	ODF	OD	ODF	OD	ODF
M1 Accessibility for all household members	4%	4%	4%	0%	0%	10%	4%	4%	8%	3%	3%	5%	4%	7%	6%	4%	4%	5%	5%	0%	3%
M2 Wanting to be like others	6%	7%	6%	8%	6%	15%	7%	4%	5%	8%	5%	8%	10%	2%	5%	9%	5%	7%	7%	7%	6%
M3 Convenience, comfort	10%	9%	10%	5%	10%	15%	11%	9%	9%	9%	11%	11%	12%	14%	9%	8%	10%	10%	11%	7%	10%
M4 Privacy and security	12%	9%	12%	5%	11%	0%	7%	10%	12%	9%	10%	10%	10%	17%	20%	9%	12%	10%	12%	7%	14%
M5 Cultural, religious, moral beliefs	2%	1%	2%	0%	0%	0%	5%	1%	0%	3%	1%	1%	1%	2%	2%	3%	3%	2%	1%	0%	3%
M6 Shame, disgust, pride or fear	18%	16%	19%	18%	17%	20%	19%	13%	17%	17%	19%	15%	21%	24%	21%	21%	20%	14%	19%	19%	17%
M7 Health	22%	23%	22%	30%	25%	25%	19%	19%	21%	20%	23%	23%	27%	20%	20%	21%	21%	22%	22%	25%	21%
M8 Improving things for the family	5%	4%	6%	7%	9%	5%	8%	3%	2%	0%	2%	5%	9%	0%	1%	3%	5%	3%	6%	5%	6%
M9 Force (by-laws, penalties, threats)	6%	6%	6%	0%	0%	5%	8%	7%	3%	13%	11%	4%	2%	3%	10%	9%	8%	6%	5%	4%	7%
M10 Rewards, incentives	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%
M11 Follow-up visits, advice, external support	6%	6%	6%	7%	9%	5%	10%	13%	7%	3%	2%	2%	2%	3%	2%	3%	5%	6%	6%	7%	5%
M12 Sanitation or hygiene promotion campaigns	7%	10%	6%	20%	12%	0%	3%	14%	16%	8%	12%	0%	0%	8%	5%	8%	5%	8%	6%	15%	9%
DM1 Inconvenience, lack of comfort, privacy	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
DM2 Location too far or hard to reach	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DM3 Fear of harm - slab collapsing, falling in	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DM4 Regular cleaning too much effort and very smelly latrine	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
DM5 Maintenance - repairs and pit emptying too difficult/d	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DM6 Unaffordable & lack of credit to rebuild	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	3%	0%	0%	0%	1%	0%	1%	0%	0%	0%
DM7 Shared with others	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	5%	0%	0%	0%	0%	0%	2%	0%	0%	0%
DM8 Cultural, religious, moral beliefs	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DM9 No more support	0%	1%	0%	0%	0%	0%	0%	0%	0%	2%	0%	3%	0%	0%	0%	1%	0%	1%	0%	1%	0%
DM10 Peer pressure, being like others	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	0%	0%
DM11 Lack of Time	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
F1 Local soil and ground conditions	16%	14%	16%	18%	20%	12%	18%	12%	6%	17%	20%	5%	4%	21%	18%	13%	14%	13%	16%	17%	19%
F2 Availability of land, materials, labour	28%	30%	28%	29%	27%	29%	26%	34%	31%	29%	33%	25%	35%	29%	26%	30%	30%	28%	28%	32%	25%
F3 Availability of water	11%	9%	12%	2%	11%	0%	3%	14%	17%	7%	8%	9%	14%	21%	21%	15%	10%	10%	13%	5%	10%
F4 Quality of initial construction	2%	1%	2%	3%	4%	0%	2%	0%	0%	2%	3%	0%	1%	0%	3%	0%	1%	1%	3%	3%	4%
F5 Technical advice or knowledge	16%	14%	17%	25%	23%	24%	24%	14%	14%	8%	13%	2%	3%	6%	9%	8%	17%	11%	16%	22%	17%
F6 Subsidies	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%
F7 Affordability, cost	17%	17%	17%	23%	15%	24%	20%	15%	19%	17%	16%	14%	24%	10%	11%	11%	17%	18%	16%	17%	17%
F8 Support from others in the community	7%	6%	7%	0%	0%	12%	8%	11%	12%	11%	7%	0%	4%	13%	12%	15%	10%	7%	6%	3%	7%
DF1 Local soil and ground conditions	1%	2%	0%	0%	0%	0%	0%	0%	0%	2%	1%	14%	5%	0%	0%	2%	0%	4%	1%	1%	0%
DF2 Availability of land, materials, labour	1%	4%	1%	0%	0%	0%	0%	0%	0%	4%	0%	22%	7%	0%	0%	2%	0%	6%	1%	2%	0%
DF3 Availability of water	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	0%	0%	0%	1%	0%	0%	0%
DF4 Quality of initial construction	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	0%	0%
DF5 Technical advice or knowledge	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	6%	1%	0%	0%	2%	0%	2%	0%	0%	0%

ANNEX F – FACTOR COUNTS BY COUNTRY, PROGRAM UNIT AND VILLAGE TYPE

CURRENT FACTORS

Factors	Current Factors			Ethiopia				Kenya				Uganda		Sierra Leone		Type 1		Type 2		Type 3	
	Totals	OD	ODF	Jimma		Shebedino		Kilifi		Homabay		Tororo		Port Loko		OD	ODF	OD	ODF	OD	ODF
				OD	ODF	OD	ODF	OD	ODF	OD	ODF	OD	ODF	OD	ODF						
M1 Accessibility for all household members	5%	1%	6%	0%	0%	0%	7%	1%	14%	1%	6%	0%	5%	2%	5%	0%	5%	1%	6%	0%	4%
M2 Wanting to be like others	4%	0%	5%	0%	4%	0%	4%	0%	3%	0%	6%	0%	2%	0%	7%	0%	5%	0%	4%	0%	6%
M3 Convenience, comfort	9%	1%	11%	0%	13%	0%	12%	0%	11%	2%	11%	0%	8%	2%	11%	1%	11%	1%	11%	1%	12%
M4 Privacy and security	10%	1%	11%	1%	15%	0%	10%	0%	10%	1%	5%	1%	10%	2%	15%	1%	11%	1%	11%	1%	13%
M5 Cultural, religious, moral beliefs	1%	0%	1%	0%	0%	0%	3%	0%	0%	1%	1%	0%	0%	0%	1%	0%	3%	0%	1%	0%	1%
M6 Shame, disgust, pride or fear	14%	1%	17%	1%	18%	0%	19%	0%	13%	1%	14%	2%	17%	5%	16%	3%	18%	1%	16%	1%	17%
M7 Health	18%	1%	21%	2%	26%	0%	20%	0%	21%	1%	19%	3%	23%	0%	17%	0%	21%	2%	21%	1%	20%
M8 Improving things for the family	6%	0%	7%	0%	7%	0%	10%	0%	3%	0%	3%	0%	14%	0%	4%	0%	6%	0%	8%	0%	6%
M9 Force (by-laws, penalties, threats)	5%	0%	6%	0%	0%	0%	8%	0%	3%	1%	8%	1%	3%	0%	9%	0%	8%	0%	5%	0%	4%
M10 Rewards, incentives	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	3%	0%	0%	0%	1%	0%	1%	0%	1%	0%	1%
M11 Follow-up visits, advice, external support	5%	0%	6%	1%	6%	0%	5%	0%	10%	1%	6%	0%	2%	0%	7%	0%	6%	1%	6%	0%	4%
M12 Sanitation or hygiene promotion campaigns	4%	0%	5%	1%	12%	0%	0%	1%	12%	0%	12%	0%	0%	0%	2%	0%	4%	0%	5%	0%	8%
DM1 Inconvenience, lack of comfort, privacy	3%	13%	1%	32%	0%	18%	0%	14%	0%	9%	1%	3%	1%	12%	1%	8%	0%	9%	1%	23%	1%
DM2 Location too far or hard to reach	1%	5%	0%	21%	0%	6%	0%	0%	0%	4%	0%	3%	0%	0%	0%	3%	0%	4%	0%	10%	0%
DM3 Fear of harm - slab collapsing, falling in	2%	10%	0%	12%	0%	12%	0%	7%	0%	13%	1%	8%	1%	10%	0%	10%	0%	10%	1%	10%	0%
DM4 Regular cleaning too much effort and very smelly latrine	0%	2%	0%	3%	0%	12%	0%	0%	0%	2%	0%	1%	0%	0%	0%	1%	0%	2%	0%	1%	0%
DM5 Maintenance - repairs and pit emptying too difficult/costly	2%	11%	1%	23%	0%	12%	0%	9%	0%	13%	2%	3%	2%	21%	1%	12%	0%	10%	1%	15%	1%
DM6 Unaffordable & lack of credit to rebuild	3%	16%	1%	0%	0%	12%	0%	12%	0%	23%	1%	23%	3%	19%	1%	22%	0%	19%	1%	5%	1%
DM7 Shared with others	2%	11%	1%	0%	0%	0%	0%	5%	0%	13%	0%	22%	3%	10%	1%	16%	0%	12%	1%	4%	1%
DM8 Cultural, religious, moral beliefs	0%	2%	0%	0%	0%	0%	0%	4%	0%	3%	0%	0%	0%	0%	0%	1%	0%	2%	0%	2%	0%
DM9 No more support	3%	16%	1%	1%	0%	29%	0%	22%	0%	13%	1%	20%	3%	17%	1%	19%	0%	17%	1%	13%	1%
DM10 Peer pressure, being like others	1%	8%	0%	3%	0%	0%	0%	19%	0%	2%	0%	6%	2%	0%	0%	3%	0%	8%	0%	9%	0%
DM11 Lack of Time	0%	1%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	2%	0%
F1 Local soil and ground conditions	13%	1%	15%	0%	17%	0%	19%	1%	9%	0%	14%	1%	5%	3%	16%	0%	14%	1%	15%	0%	17%
F2 Availability of land, materials, labour	22%	1%	26%	2%	27%	0%	25%	1%	26%	0%	25%	2%	39%	7%	21%	2%	29%	2%	27%	1%	23%
F3 Availability of water	11%	1%	13%	1%	11%	0%	3%	1%	19%	0%	15%	1%	13%	7%	22%	2%	12%	1%	13%	0%	13%
F4 Quality of initial construction	5%	0%	6%	1%	8%	0%	3%	0%	5%	0%	14%	0%	1%	3%	8%	0%	4%	0%	6%	1%	10%
F5 Technical advice or knowledge	13%	1%	15%	2%	21%	0%	25%	0%	11%	0%	11%	0%	2%	0%	7%	0%	17%	0%	14%	1%	16%
F6 Subsidies	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	1%
F7 Affordability, cost	12%	1%	14%	1%	13%	0%	18%	1%	19%	0%	10%	1%	15%	0%	9%	0%	13%	1%	15%	1%	13%
F8 Support from others in the community	5%	0%	5%	0%	0%	0%	6%	1%	10%	0%	2%	1%	2%	0%	10%	0%	9%	1%	4%	0%	4%
DF1 Local soil and ground conditions	5%	25%	1%	40%	0%	36%	0%	17%	0%	28%	2%	20%	6%	14%	1%	27%	0%	21%	2%	33%	1%
DF2 Availability of land, materials, labour	7%	32%	2%	3%	0%	14%	0%	35%	0%	37%	3%	52%	10%	28%	2%	33%	0%	38%	2%	20%	1%
DF3 Availability of water	2%	13%	1%	31%	0%	7%	0%	11%	0%	4%	1%	8%	3%	7%	0%	2%	0%	12%	1%	18%	1%
DF4 Quality of initial construction	2%	11%	0%	20%	0%	14%	0%	10%	0%	13%	2%	2%	0%	21%	1%	16%	0%	8%	0%	17%	1%
DF5 Technical advice or knowledge	3%	13%	1%	0%	0%	29%	0%	23%	0%	17%	1%	11%	4%	10%	1%	18%	0%	15%	1%	10%	1%

ANNEX F – FACTOR COUNTS BY COUNTRY, PROGRAM UNIT AND VILLAGE TYPE**RANKED FACTORS – TOP THREE ONLY**

Factors	Whole Study				Jimma				Shebedino				Kilifi				Homabay				Port Loko/Moyamba				Tororo			
	Factors -Men OD	Factors -Men ODF	Factors -Women OD	Factors -Women ODF	Factors -Men OD	Factors -Men ODF	Factors -Women OD	Factors -Women ODF	Factors -Men OD	Factors -Men ODF	Factors -Women OD	Factors -Women ODF	Factors -Men OD	Factors -Men ODF	Factors -Women OD	Factors -Women ODF	Factors -Men OD	Factors -Men ODF	Factors -Women OD	Factors -Women ODF	Factors -Men OD	Factors -Men ODF	Factors -Women OD	Factors -Women ODF	Factors -Men OD	Factors -Men ODF	Factors -Women OD	Factors -Women ODF
M1 Accessibility for all household members	2	89	5	98	0	2	0	1	0	31	0	29	0	15	1	19	0	4	0	8	2	32	3	26	0	5	1	15
M2 Wanting to be like others	3	69	4	81	0	13	0	18	0	19	0	26	0	0	0	2	0	6	0	5	2	29	4	25	1	2	0	5
M3 Convenience, comfort	1	175	4	232	0	49	0	49	0	41	0	55	0	10	0	18	0	6	1	19	1	60	3	66	0	9	0	25
M4 Privacy and security	8	249	9	289	0	60	1	66	0	43	0	48	0	11	1	19	0	7	0	9	7	109	6	115	1	19	1	32
M5 Cultural, religious, moral beliefs	1	33	2	25	0	0	0	0	0	17	0	9	0	0	0	0	0	2	1	3	1	12	1	11	0	2	0	2
M6 Shame, disgust, pride or fear	13	386	10	480	1	71	1	75	0	151	0	181	0	11	0	17	0	16	0	25	9	109	5	120	3	28	4	62
M7 Health	13	586	18	692	1	143	2	142	0	196	0	213	0	29	1	49	0	24	0	53	8	138	9	150	4	56	6	85
M8 Improving things for the family	0	163	0	183	0	28	0	30	0	85	0	84	0	2	0	6	0	4	0	9	0	12	0	8	0	32	0	46
M9 Force (by-laws, penalties, threats)	1	82	1	65	0	1	0	1	0	31	0	10	0	1	0	5	0	7	0	18	1	39	1	23	0	3	0	8
M10 Rewards, incentives	0	7	0	11	0	1	0	2	0	0	0	0	0	0	0	0	0	2	0	6	0	2	0	3	0	2	0	0
M11 Follow-up visits, advice, external support	2	74	4	78	1	30	1	23	0	16	0	12	0	3	0	14	0	2	1	10	1	21	1	14	0	2	1	5
M12 Sanitation or hygiene promotion campaigns	1	107	1	129	0	58	1	53	0	2	0	3	0	14	0	31	0	15	0	23	1	18	0	19	0	0	0	0
DM1 Inconvenience, lack of comfort, privacy	44	11	67	15	30	3	31	1	2	0	2	0	5	0	19	0	7	0	10	2	0	2	0	4	0	6	5	8
DM2 Location too far or hard to reach	22	0	32	0	18	0	19	0	1	0	1	0	0	0	1	0	3	0	6	0	0	0	0	0	0	0	5	0
DM3 Fear of harm - slab collapsing, falling in	38	4	46	6	11	0	9	0	2	0	1	0	5	0	10	0	13	1	19	2	0	2	0	2	7	1	7	2
DM4 Regular cleaning too much effort and very smelly latrine	10	0	7	2	4	0	4	0	2	0	1	0	0	0	0	0	3	0	1	0	0	0	0	1	1	0	1	1
DM5 Maintenance - repairs and pit emptying too difficult/costly	44	10	65	13	18	3	25	1	2	0	2	0	6	0	18	0	14	1	17	5	1	2	1	1	3	4	2	6
DM6 Unaffordable & lack of credit to rebuild	44	8	92	17	0	0	0	0	2	0	2	1	5	0	19	0	25	2	35	3	1	3	1	3	11	3	35	10
DM7 Shared with others	23	7	56	14	0	0	0	0	0	0	0	0	4	0	6	0	8	1	15	0	0	2	0	2	11	4	35	12
DM8 Cultural, religious, moral beliefs	4	0	8	0	0	0	0	0	0	0	0	0	3	0	5	0	1	0	2	0	0	0	0	0	0	0	1	0
DM9 No more support	35	9	86	13	0	0	0	0	4	0	3	0	10	0	33	0	9	1	18	0	0	4	0	3	12	4	32	10
DM10 Peer pressure, being like others	19	2	33	6	3	0	2	0	0	0	0	0	13	0	23	0	0	0	1	0	0	0	0	1	3	2	7	5
DM11 Lack of Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F1 Local soil and ground conditions	6	274	11	325	0	72	0	74	0	98	0	114	0	11	1	20	0	11	2	27	6	79	7	78	0	3	1	12
F2 Availability of land, materials, labour	9	619	17	724	1	139	2	144	0	195	0	203	0	36	1	58	0	25	2	53	7	131	9	132	1	93	3	134
F3 Availability of water	8	250	9	304	1	53	1	53	0	18	0	26	0	17	0	22	0	14	0	31	6	135	6	142	1	13	2	30
F4 Quality of initial construction	1	111	1	114	0	31	0	30	0	16	0	8	0	2	0	7	0	19	0	25	1	43	1	41	0	0	0	3
F5 Technical advice or knowledge	4	341	6	339	1	96	2	92	0	192	0	175	0	10	1	17	0	14	0	17	3	27	3	32	0	2	0	6
F6 Subsidies	1	8	0	8	0	1	0	0	0	4	0	2	0	0	0	0	0	0	0	1	1	3	0	5	0	0	0	0
F7 Affordability, cost	5	227	9	286	0	59	1	60	0	69	0	81	0	14	1	30	3	12	4	21	1	57	1	55	1	16	2	39
F8 Support from others in the community	5	98	5	112	0	0	0	0	0	27	0	28	0	5	0	21	2	2	3	2	2	60	2	56	1	4	0	5
DF1 Local soil and ground conditions	83	18	122	23	35	5	38	2	5	0	4	0	10	0	20	0	22	1	32	3	4	4	3	2	7	8	25	16
DF2 Availability of land, materials, labour	86	28	154	37	4	0	4	0	2	0	2	0	20	0	51	0	29	1	38	3	3	9	2	8	28	18	57	26
DF3 Availability of water	36	12	60	14	24	3	29	2	1	1	1	0	4	0	14	0	3	0	7	1	1	3	1	3	3	5	8	8
DF4 Quality of initial construction	43	9	48	8	16	0	20	0	2	0	1	0	6	0	13	0	14	2	10	3	3	7	2	4	2	0	2	1
DF5 Technical advice or knowledge	35	15	57	15	0	3	0	2	5	1	4	0	11	0	28	0	15	0	15	0	0	9	1	5	4	2	9	8