Demand Assessment for Sanitary Latrines in Rural and Urban Areas of Cambodia

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EXECUTIVE SUMMARY

This report presents an assessment of demand for sanitary latrines in rural and urban areas of Cambodia. The objective of the study was to understand perceptions, desires, and practices regarding latrine use as a basis for designing interventions to stimulate demand.

Village and household level interviews and focus group discussions were conducted in three rural areas (Kandal, Svay Rieng and Siem Reap provinces), three urban areas (Phnom Penh, Svay Rieng, and Siem Reap municipalities), and two special case villages that had undertaken a process of Community-Led Total Sanitation. In total 41 villages and 939 households were surveyed, including both latrine owners and non-owners. In addition, six focus group discussions were conducted with a total of 44 participants including women and men, latrine owners and non-owners.

The results of the survey and focus group discussions provide information and insights relating to respondent demographic and economic profiles, water sources, current sanitation practices, perceptions about latrines, the decision to purchase a latrine, information channels, and the experience of disabled people with sanitation.

Among the survey population, 13% of rural households and 79% of urban households own a latrine. Latrine coverage varied widely among villages, ranging from 0% to 100%, depending on environmental conditions, socio-economic factors, and the influence of NGO programs.

Unsurprisingly, latrine ownership was found to be more common among better-off households than in poorer households. Income and cost are key factors in a household's decision to purchase a latrine, but they are not the only factors. A reluctance to build low-end latrines, a lack of attractive low-cost alternatives in that market, and the low rank of sanitation in household priorities are also important obstacles.

The survey results indicated a generally high level of awareness of hygiene issues. The majority of respondents could name basic sanitation messages and health/hygiene were in the top three perceived benefits of latrine ownership and top two motivations for latrine purchase.

1 Introduction

This report summarizes the rationale, methodology, and results from an assessment of demand for sanitary latrines in rural and urban areas of Cambodia. The study was commissioned by the World Bank Water and Sanitation Program (WSP) in Cambodia and undertaken by International Development Enterprises (IDE) in March 2006.

This demand assessment is envisioned as one component of a larger program to enhance access to improved sanitation including the development of improved latrine designs, consumer information channels, and sanitation marketing models.

2 BACKGROUND

Successive recent surveys in Cambodia¹ continue to show low to very low coverage rates for rural sanitation. While coverage is increasing slowly, the rate of growth is well below that for improved water supplies and barely manages to keep up with population growth. At current rates the Cambodia Millennium Development Goals (CMDG) for sanitation will be missed by a wide margin. More important, the absence of hygienic latrines in rural villages and schools denies community members the benefits that accrue from latrine ownership and use, be they related to health, privacy or dignity.

External investment in the sector is low to nonexistent, and some evidence exists to suggest that current approaches may be depressing sanitation demand rather than increasing it. Most sanitation improvement programs focus on providing services at subsidized costs, or completely free of charge. Since approaches among NGOs and other agencies differ, families may hold out for the "best deal", slowing down overall growth in sanitation services.

Where households do choose to invest in sanitation services, the designs offered by local builders tend to be expensive and sometimes inappropriate. The high costs result in mostly affluent community members ending up with latrines. With fewer than one in ten families owning a latrine, it is hard for households to gather reliable information on costs and benefits of ownership from neighbours.

The current situation appears to offer potential to make sanitation attractive and accessible to Cambodia's rural poor by developing marketable sanitation solutions.

3 OBJECTIVES AND SCOPE

The assessment investigates perceptions, desires, and practices of households with and without latrines with special regard to:

- current practices related to latrine use;
- actual and perceived benefits and costs of latrine ownership;
- actual and desired features and price range for latrines;
- · the decision-making and purchasing process for latrines; and
- information channels for sanitation issues.

The study areas included in the survey are classified into three groups:

- Rural (27 villages),
- Urban (12 villages), and
- Special cases (2 villages).

Residents in the two special case villages had worked through a Community Led Total Sanitation (CLTS) process facilitated by development organizations: Concern in Siem Reap and the Ministry of Rural Development in partnership with UNICEF in Kampong Speu. These villages were considered to be of special interest because they had been through an extended process of reflection and community mobilization around the issue of sanitation and may therefore have different knowledge, attitudes, and practices than other villages.

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¹ Cambodia Inter-Census Population Survey, 2004; Cambodia Socio-Economic Survey, 2004.

4 METHODOLOGY

4.1 Survey Tools

4.1.1 Questionnaires

Two questionnaires were developed for the study: one to collect household-level data and another to collect village-level data. The household level questionnaire was circulated among interested parties in the Cambodian WATSAN sector and several comments and suggestions were received and incorporated. In the week preceding field work, the questionnaires were field tested and revised and the survey teams were trained in the purpose and use of each question on the forms. Copies of the questionnaires in English and Khmer are included in Annexes A through C.

Field work for the survey occurred over a three week period from March 13 through March 30, 2006. Questionnaire interviews were conducted by three survey teams, each consisting of a Lead Surveyor and two Surveyors. All teams were supervised by the Survey Coordinator. A list of the survey team members is presented in Annex H.

Data from the completed questionnaire forms was entered into a Microsoft Access database by one of the Lead Surveyors and cleaned by the IDE Technical Advisor.

4.1.2 Focus Group Discussions

Focus group discussions were used to probe, in a more qualitative way, a number of topics touched on by the questionnaire. All discussions were led by the same Facilitator using a discussion guideline for greater consistency. The discussion guideline is included in Annex E. During each discussion, the facilitator was assisted by one of the Survey Team members who acted as a note-taker. Discussions were also tape recorded and important points transcribed in English (Annex F).

4.2 Sample Selection

4.2.1 Selection of Study Provinces

Practical considerations of time and budget limited the survey to three provinces. Three provinces were selected in consultation with WSP to encompass a range of socio-economic and environmental conditions that is broadly representative of rural and urban areas in Cambodia. The selected provinces include Kandal, Siem Reap, and Svay Rieng with the associated urban areas of Phnom Penh, Siem Reap Town, and Svay Rieng Town, respectively (Figure 1). The selected study locations include areas with high, medium, and low access to improved sanitation as indicated in Table 1.

Figure 1: Study Locations

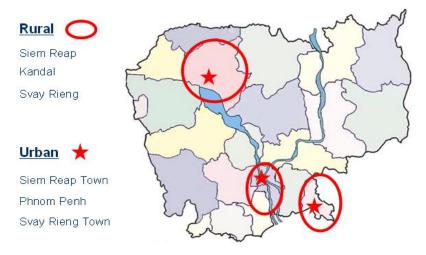


Table 1: Access to Improved Sanitation by Province

Province	Rank [1]
Phnom Penh	1.000
Shihanoukville	0.284
Battambang	0.209
Kratie	0.179
Koh Kong	0.176
Kandal	0.174
Kampong Thom	0.174
Kampong Cham	0.139
Krong Kep	0.132
Banteay Meanchey	0.115
Svay Rieng	0.101
Pursat	0.099
Kampot	0.088
Mondulkiri	0.066
Krong Pailin	0.059
Prey Veng	0.053
Kampong Chhnang	0.053
Takeo	0.051
Kampong Speu	0.037
Steung Treng	0.031
Preah Vihear	0.031
Siem Reap	0.029
Rotanakiri	0.024
Otdar Meanchey	0

^[1] Proportional rank based on the percentage of urban and rural population with access to improved sanitation. Source: 2003 Cambodian MDG Progress Report

4.2.2 Selection of Questionnaire Respondents in Rural Areas

A total of 512 rural households (95 latrine owners and 417 non-latrine owners) were selected as questionnaire respondents using the following procedure:

- For each of the three selected provinces, a list of rural villages and village populations was compiled from village level census data (1998).
- Nine villages were selected randomly from each of the three provinces using Probability Proportional to Size (PPS) sampling, wherein the chance of a village being selected is proportional to village population.
- In each village, the survey team consulted the village chief and knowledgeable villagers to
 obtain a list of all village households and to identify all households that owned latrines.
- From the list of households that did not own latrines, 14 households were selected randomly in each village for interviewing.
- From the list of households that did own latrines, four households were selected randomly in
 each village for interviewing. If there were four or fewer latrine owners in the village, all
 available latrine owners were interviewed.
- If extra time was available in a village, additional latrine owners and/or non-latrine owners were selected randomly for interviewing. The number of households selected and interviewed in each rural village ranged from 14 to 22 non-latrine owners and 0 to 6 latrine owners

4.2.3 Selection of Questionnaire Respondents in Urban Areas

A total of 390 urban households were selected as questionnaire respondents using the following procedure:

- Urban villages were defined according to the Reclassification of Urban Areas in Cambodia (National Institute of Statistics, Ministry of Planning, November 2004)
- In Phnom Penh, a list of villages was compiled from three districts—Russey Keo, Mean Chey, Dangkor—identified as poor or very poor based on the knowledge of the study team. Four villages were selected randomly from the list using PPS sampling.
- In Siem Reap, four villages were selected randomly from all urban districts using PPS sampling
- In Svay Rieng, no districts are officially classified as urban. Instead, four villages were selected randomly using PPS sampling from among all villages in Svay Rieng Township (tiroumkhet).
- It was not possible to obtain a complete listing of households in each selected urban village. Individual households were selected by dividing the village into three regions, each assigned to a different surveyor. Surveyors selected at least ten scattered respondent households within their region based on opportunity sampling. The number of households interviewed in each urban village ranged from 29 to 36.
- No differentiation was made between households that owned latrines and those that did not.

4.2.4 Selection of Questionnaire Respondents in Special Case Villages

A total of 37 households were selected as questionnaire respondents in special case villages using the following procedure:

- Two special case villages were selected in consultation with WSP, UNICEF, and Concern from villages that had previously implemented Community Led Total Sanitation (CLTS) projects. One Concern village and one UNICEF village were selected.
- Within each special case village, individual households were selected by dividing the village into three regions and having surveyors select at least six scattered respondent households

based on opportunity sampling. The numbers of households interviewed in the two special case villages were 18 and 19.

No differentiation was made between households that owned latrines and those that did not.

4.2.5 Selection of Focus Group Participants

A total of 44 people participated in six focus group discussions—one group in each rural and urban area of the three study provinces. Participants were selected according to the following procedure:

- After questionnaires were completed in each survey area, the Survey Team invited eight of the questionnaire respondents to participate in a focus group discussion on the following day.
- The eight invitees were selected based on the Survey Team's assessment of their specific interest or knowledge and ability to contribute to a group discussion.
- The Survey Team sought a balance of women and men, and latrine owners and non-owners.
- All invited participants took part in the focus group discussions except for one case where
 only four of the invitees showed up due to a miscommunication about the meeting place. A
 summary list of the focus group participants is included in Annex I.

5 RESULTS

5.1 Village Questionnaire: Latrine Coverage Rates

A summary of responses from the village-level questionnaire survey is included in Annex J. Information was collected on population, number of existing latrines, and number of household-level interviews conducted for this project. Additional data was collected on the distance to the nearest markets and previous exposure to NGO programs as a means of understanding and explaining variations in latrine coverage between villages.

The number of existing latrines in each study village was provided by village leaders based on records that they update periodically for reporting to commune authorities. The survey teams did not undertake a systematic count of latrines in the survey villages, nor did they attempt to ascertain the quality or condition of the reported latrines.

5.1.1 Rural Areas

Village-level surveys were conducted in 27 rural villages comprising 5,088 households. On average, 13% of the households owned latrines at the time of the survey. The latrine coverage ranged from very low (0% in five villages) to very high (92% in one village). Based on field observations and survey data, the wide difference in latrine coverage among villages may be attributed to a number of factors, including:

- the presence or absence of NGO activity,
- local environmental conditions (e.g., housing density, availability of nearby tree cover),
- location on a main road or near a market,
- level of education, awareness, and standard of living, and
- level of interest and motivation among local leaders.

In Touk Ma village (92% coverage), for instance, an NGO has provided subsidized latrines. In Kampong Kdei 1 village (82% coverage), there has been no NGO activity but it is located close to a district market and many of the residents are merchants, traders, or government employed teachers and police and tended to have higher education, sanitation awareness, and standard of living.

In total, 78% of the villages had been previously exposed to NGO programs of some sort, with 45% receiving assistance related to sanitation or health

5.1.2 Urban Areas

Village-level surveys were conducted in 14 villages comprising 7,615 households. On average, 79% of the households had latrines. At the high end, two Phnom Penh villages had 100% coverage. At the low end was Aranh village in Siem Reap with only 6% coverage. Aranh is located on the main road south of the Siem Reap town center along a river (*Stoeung Siem Reap*) that cuts through a seasonally flooded wetland.² Residents depend primarily on fishing for their livelihood and are generally very poor. It is likely that low incomes and regular wet season inundation hinder the development of permanent latrine structures.

Sixty-seven percent of the villages had been previously exposed to NGO programs of some sort, with 42% receiving assistance related to sanitation or health

5.1.3 Special Case Villages

Among the two special case villages, where the population had gone through a Community-Led Total Sanitation (CLTS) process, one had relatively high coverage (75%) while the other had a low coverage rate (5%). In the latter case, an abundance of trees in the area providing convenient locations for open defecation may have contributed to the low uptake of latrines.

5.2 Household Questionnaire: Latrine Knowledge, Attitudes, and Practice

A question-by-question summary of responses from the household-level questionnaire survey is included in Annex K. Responses are presented in separate tables for rural and urban areas and special case villages. Within each table, the responses for each question are disaggregated by latrine ownership. The analysis consists of simple averages and percentages; statistical significance of results was not calculated. Raw data from the survey is available from the authors for readers who may wish to make a more detailed analysis.

The following sections summarize and elaborate on the data presented in Annex K with emphasis on differences between latrine owners and non-owners in areas that relate to the demand for and/or marketing of sanitation services.

5.2.1 Consumer Profile

Table 2: Demographics

Q	Description	Rural		Urban	
		Latrine	No Lat	Latrine	No Lat
		n=95*	n=417*	n=228*	n=162*
Q1	Average HH size	5.6	5.3	5.2	5.2
Q1b	Average age of all HH members	30.0	25.1	26.4	24.1
Q1b	Percentage of people (out of all people in respondent	3.7%	7.2%	6.4%	11%
	HHs) that are under 5 years old				
Q1c	Percentage of female-headed HHs	19%	21%	23%	34%
Q1d	Average years of education of all HH members 18	6.1	4.5	6.8	4.6
	years or older				

^{*} Unless noted otherwise, sample sizes (n) for all Rural and Urban villages are as indicated here

In comparison with latrine owners, non-owners tend to be younger, have more children under five years old, include more female-headed households, and have less education.

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² In the household-level questionnaire, most respondents from Aranh village said that they defecate "on the ground" and none claimed to defecate "in a water body." The survey was conducted in the latter half of the dry season (March) when the seasonally flooded plains are dry and provide ample vegetation cover for open defecation.

Table 3: Incidence of Diarrhea

Q	Description [1]	Rural		Urban	
		Latrine	No Lat	Latrine	No Lat
Q1e	Percentage out of all people in respondent HHs that had <i>at least one loose stool</i> in the past 2 weeks	6.7%	8.2%	7.5%	6.4%
Q1e	Percentage of under-5s (out of all under-5s) that had at least one loose stool in the past 2 weeks	30%	30%	39%	28%

^[1] Data is of questionable quality and does not represent the standard definition of a "diarrhea case." See discussion below.

During the field work for the survey, there was confusion within the Survey Team regarding the definition of a diarrhea case.³ Instead of counting discrete diarrhea cases, Surveyors attempted to count each loose stool in the preceding two weeks. The responses received were of questionable accuracy and it was not possible to determine the actual number of diarrhea cases. Instead, the Table above shows the percentage of individuals who experienced at least one loose stool in the preceding two weeks. This data is included in the report primarily for completeness, even though it is considered to be of low quality. The results yield the counter-intuitive conclusion that latrine owners experience loose stools more often than non-owners in urban areas.

Table 4: Residential Land Ownership

Q	Description	Rural		Urban	
		Latrine	No Lat	Latrine	No Lat
Q3a	Percentage of respondents who own their residential land	100%	99%	88%	86%
Q3b	Percentage of respondents (out of all respondents that own their residential land) who have title to their residential land	68%	64%	68%	45%
Q3c	Percentage of respondents that are flooded				
	Never	52%	55%	52%	35%
	Sometimes	40%	31%	37%	43%
	Every year	8%	13%	11%	22%

In both rural and urban areas there was no significant difference in residential land ownership between those with and without latrines although those without latrines in urban areas were less likely to have title to their land. Non-latrine owners in urban and rural areas were more likely to live in areas that are flooded annually. This relationship may reflect a tendency for poorer households to occupy less-desirable flooded land and/or the higher cost of latrines suitable for seasonally flooded land.

Table 5: Socioeconomic Characteristics

Q	Description	Rural		Urban	
		Latrine	No Lat	Latrine	No Lat
Q2a	Percentage of respondents who own agricultural land	88%	90%	21%	44%
Q2b	Average land size for respondents that own agricultural land (ha)	1.7	1.2	1.1	0.95
Q4	Percentage of respondents with solid roof material (concrete, fibrous concrete, galvanized steel, tiles)	95%	80%	98%	85%
Q5	Asset ownership index (simple sum of proportions of respondents that own each asset listed in Q5; not weighted for asset value)	8.7	6.5	6.4	5.0

Latrine owners tended to be more well off than non-owners as indicated by roof construction material and asset ownership. In urban areas, more non-latrine owners owned agricultural land indicating a

³ The standard definition being at least three loose stools within a 24-hour period with separate diarrhea cases being separated by at least 3 days without symptoms.

greater dependence on farming as an income source. In both rural and urban areas, landholdings of latrine owners tend to be larger than those of non-owners.

Table 6: Spending Priorities

Q	Description	Rural Urban		oan	
		Latrine	No Lat	Latrine	No Lat
Q6	Average rank between 0 and 9 given by respondents to each of the following expense categories based on the amount they had spent in the past year (largest				
	annual expense is 9; no annual expense is 0)				
	Food	8.6	8.5	8.7	8.8
	Ceremonies/gifts	6.6	6.5	6.0	6.2
	Health care	6.2	6.3	5.9	6.2
	Clothing	4.7	4.5	5.0	4.4
	Education	5.2	4.3	5.2	4.1
	Agricultural inputs	3.6	4.0	0.5	1.4
	Consumer goods	2.9	2.5	3.5	2.8
	Housing	1.8	1.6	2.2	1.7
	Productive assets	0.9	1.0	0.6	0.7

The items in the above table are sequenced from largest to smallest expense categories for rural nonlatrine owners. There is little sequence difference among the four population groups for the top five expense categories. Where households have very small incomes, discretionary spending may be limited and as such these rankings may represent more of an expression of need than preference. However, the high ranking of ceremonies/gifts is noteworthy. If latrines are perceived in the mind of consumers as a consumer good or a housing expense, then they are quite far down the list of priorities.

Table 7: Income and Income Sources

Q	Description	Rural		Urban	
		Latrine	No Lat	Latrine	No Lat
Q7	Median net annual cash income (USD)	\$702	\$355	\$890	\$445
Q7	Median net annual cash income per household	\$125	\$67	\$171	\$86
Q1	member (USD per capita)				
Q7	Average percentage of total income from each source				
	Salary	17%	29%	39%	22%
	Non-farm labour	13%	21%	10%	27%
	Business/trading	40%	21%	45%	28%
	Non-agricultural subtotal	70%	71%	94%	77%
	Selling animal products	8%	9%	1%	2%
	Selling rice	15%	7%	1%	2%
	Farm labour	2%	5%	1%	3%
	Selling non-rice crops	4%	3%	1%	3%
	Agricultural subtotal	29%	24%	4%	10%
	Gifts	1%	1%	0%	2%
	Other	0%	4%	3%	12%
	Gifts and other subtotal	1%	5%	3%	14%
	TOTAL	100%	100%	100%	100%

The median net cash income of latrine owners in both rural and urban areas was approximately double that of non-owners. Urban incomes, for both latrine owners and non-owners, was approximately 25% higher that rural incomes. On a per capita basis, the values range from \$67 to \$171 per annum. Cambodia's Gross National Income (GNI) per capita is US\$350 per annum (2004, World Bank Data & Statistics website). The per capita income of survey respondents is lower than the GNI because only *cash* income was counted in the survey (i.e., production consumed in the home was not counted) and respondents were all from rural and poorer urban areas of the country.

For all population groups, non-agricultural activities were among the top three cash income sources (salary, non-farm labour, business/trading). In rural areas, combined income from agricultural sources accounted for approximately one quarter of total income (selling animal products, rice, non-rice crops, and farm labour). As noted above, these data do not include the value of agricultural production that was consumed in the home.

\$2,400
\$2,000
\$1,600
\$1,200
\$800
\$400
\$400

100%

0%

20%

40%

60%

80%

100%

Figure 2: Cash Income Distribution

0%

20%

Figure 2 above presents the distribution of incomes among households within each of the four population groups. The income distribution curves for both rural and urban non-latrine owners are very similar. The curve for rural latrine owners is higher than the curves for non-owners and the curve for urban latrine owners is higher still.

80%

Tabl	e 8: Income, Latrine Coverage, and Subsidized	Latrines by Quintile
Q	Description [1]	Survey population qu

60%

40%

Q	Description [1]	Survey population quintiles (poor to rich)				
		Q_1	\mathbf{Q}_2	Q_3	Q_4	Q_5
	Rural					
Q7	Median net annual cash income	\$61	\$227	\$439	\$668	\$1,468
Q11	Percentage of households with latrines	8%	10%	18%	23%	33%
Q20	Percentage of latrines from NGOs [2]	13%	42%	6%	9%	17%
	Urban					
Q7	Median net annual cash income	\$176	\$439	\$673	\$1,068	\$2,634
Q11	Percentage of households with latrines	28%	53%	57%	69%	84%
Q20	Percentage of latrines from NGOs [2]	0%	14%	4%	4%	5%

^[1] Data is not necessarily representative of general population. See discussion below.

Results shown in Table 8 are not necessarily representative of the general population since survey respondents were selected for their latrine ownership characteristics (latrine owners were somewhat over-represented in rural areas and under-represented in urban areas). Nevertheless, the data reveal an interesting trend of increasing latrine coverage with increasing income. It is also clear that some very poor households have purchased latrines and that many better-off households still do not have them.

A minority of latrines in all quintiles were received from NGOs. Overall, about 17% of rural and 5% of urban latrines were received from NGOs, suggesting that some 83% of rural and 95% of urban latrines have been installed privately. NGO programs have been most effective at reaching households in the second poorest quintile (Q_2) while it appears that the very rich (Q_5) are better able to access NGO latrines than the very poor (Q_1) .

^[2] Includes latrines received from NGO, Health Centre, Commune Council, Village Development Committee, or Village Health Worker. In practice, NGO was selected more frequently than the latter sources, which were rarely selected (<1%).

Rural latrine owners

Rural non-owners

Urban latrine owners

Urban non-owners

Figure 3: Income Seasonality

The seasonality of income (Q8) is illustrated in Figure 3 above. In general, income availability peaks from December through April and is at its lowest from June through September. About one-third of rural respondents (latrine owners and non-owners) stated that their income was constant throughout the year. In urban areas, constant year-round incomes were reported by 77% of latrine owners and 58% of non-owners.

Jun

May

Jul

Sep

Oct

Nov

Dec

5.2.2 Water Supply

0%

Jan

Feb

Mar

Apr

Water is a major determinant of a household's general hygiene situation. Water is required in sufficient volumes and appropriate quality for consumption, cooking, washing, and in some cases for proper latrine operation (e.g., anal cleansing, flushing water-trap toilets). Water supply sources for latrine owners and non-owners are described in the following three tables.

Table 9: Wet Season Sources for Domestic Water

Q	Description		Rural			Urban	
		Lat	No Lat	CSES*	Lat	No Lat	CSES*
9a	Rainwater	23%	8%	26%	4%	3%	19%
	River/stream (tonle/o)	7%	10%		0%	0%	
	Pond (srah)	7%	5%	16%	0%	0%	11%
	Lake (boeung)	0%	0%		0%	0%	
	*Tube well	43%	51%	24%	42%	62%	24%
	Unlined open well	6%	16%	120/	4%	6%	60/
	Lined open well without cover	7%	6%	12%	7%	17%	6%
	*Lined open well with cover	2%	1%	17%	2%	1%	15%
	Water vendor	3%	3%	3%	9%	9%	7%
	*Bottled water	0%	0%	-	0%	0%	-
	*Piped water	0%	0%	1%	33%	2%	19%
	Total improved water sources (marked with * above)	45%	52%	42%	77%	65%	58%
	TOTAL	100%	100%	99%	100%	100%	100%

^{*} Source: National Institute of Statistics, Ministry of Planning, Cambodian Socio-Economic Survey (CSES), 2004. Data shown here is for rural areas and urban areas other than Phnom Penh. Water source categories differ between this survey and the CSES with approximate correspondence indicated above. Two minor CSES categories have been omitted ('public tap' and 'other'). CSES counts rainwater as an improved source but rainwater has been excluded from the improved source totals above because of the high probability of contamination in storage.

Table 10: Dry Season Sources for Domestic Water

Q	Description		Rural			Urban	
		Lat	No Lat	CSES*	Lat	No Lat	CSES*
9b	Rainwater	0%	0%	1%	0%	0%	1%
	River/stream (tonle/o)	15%	11%		0%	0%	
	Pond (srah)	12%	6%	26%	0%	0%	14%
	Lake (boeung)	0%	0%		0%	0%	
	*Tube well	51%	53%	29%	43%	63%	28%
	Unlined open well	7%	18%	1.40/	4%	7%	60/
	Lined open well without cover	6%	7%	14%	7%	17%	6%
	*Lined open well with cover	4%	2%	20%	2%	1%	16%
	Water vendor	5%	4%	8%	9%	9%	14%
	*Bottled water	0%	0%	-	0%	0%	-
	*Piped water	0%	0%	2%	35%	4%	21%
	Total improved water sources (marked with * above)	55%	54%	50%	79%	67%	65%
	TOTAL	100%	100%	99%	100%	100%	100%

^{*} Same notes as Table 9 above

Coverage of domestic water sources found in this study are compared with national statistics above. Households in this survey tended to have more tube wells and fewer open wells that the national averages but the total households with access to improved water sources was generally similar. Latrine owners tend to have water sources associated with higher quality water than non-owners. In rural areas this meant a greater dependence on rainwater (in the wet season) and less dependence on unlined open wells. In urban areas, latrine owners were many times more likely to be connected to piped water systems than non-owners.

Table 11: Treatment of Drinking Water

Q	Description	Rural		Urban	
		Latrine	No Lat	Latrine	No Lat
Q10a	Always treat drinking water	79%	56%	92%	73%
[1]	Sometimes treat drinking water	9%	13%	3%	8%
	Never treat drinking water	12%	32%	5%	19%
Q10b	Treat by boiling	93%	88%	89%	91%
[2]	Treat by filtration	11%	10%	4%	5%
	Treat with chemicals	1%	3%	1%	0%
	Other treatment method	0%	0%	8%	4%

^[1] Results expressed as percentage of all respondents

Latrine owners were more likely to treat their water, suggesting that these households give greater attention to hygiene. The predominant method of water treatment was boiling.

^[2] Results expressed as percentage of all respondents that treat their water sometimes or always.

5.2.3 Current Sanitation Practice

Table 12: Description of Existing Latrines

Q	Description	Rural		Urban	
		n=95		n=228	
Q12a	Below ground structure	Offset tank	80%	Offset tank	72%
		Unlined pit	11%	Piped sewerage	21%
		Lined pit	8%		
Q12b	Slab type	Pour flush	87%	Pour flush	97%
		Open hole wood slab	12%		
Q12c	Wall material	Concrete/brick	66%	Concrete/brick	67%
		Thatch	20%	Galvanized steel	13%
				Wood	12%
Q12d	Roof material	Galvanized steel	76%	Galvanized steel	74%
		Thatch	14%	Concrete	7%
				Thatch	6%
Q13	Average distance from	7.8 m		2.7 m	
	house to latrine				
Q21	Average age of latrine	4.4 years		5.1 years	
	(time since installation)				
Q22	Median latrine cost (USD)	\$115		\$100	

Table 13: Costs of Common Latrine Types

Below ground	Slab type	Shelter walls	Shelter roof	Percentage of	Median
				latrine owners	Cost (USD)
Rural (n=95)					
Offset tank	Pour flush	Concrete/brick	Galv. steel	60%	\$150
Concrete rings	Pour flush	Thatch	Thatch	4%	\$14
Unlined pit	Open hole in	Thatch	Thatch	5%	\$5
	wooden slab				
Urban (n=228)					
Offset tank	Pour flush	Concrete/brick	Concrete	4%	\$150
Offset tank	Pour flush	Concrete/brick	Galv. steel	37%	\$150
Piped sewer	Pour flush	Concrete/brick	Galv. steel	14%	\$117
Offset tank	Pour flush	Galv. steel	Galv. steel	8%	\$50
Offset tank	Pour flush	Wood	Galv. steel	7%	\$38

Among the households with latrines, the most popular design in both rural and urban areas included an offset tank (most commonly constructed as a soak-away pit with concrete rings), a pour-flush slab, concrete/brick walls, and a galvanized steel roof. This is a high-end design with a median reported cost of \$150. Lower cost options in rural areas—consisting of simplified shelters and/or a lower grade pit and slab—were not very common but cost less than 10% of the high-end design. In urban areas, a more diverse range of latrine designs are in common use with median reported costs ranging from \$38 to \$150.

Table 14: Defecation Location in Rural Areas

Q	Description	Latrine Ov	vners, n=95	No Latri	ne , n=417
		At home	Away	At home	Away
			from home		from home
	Location where <u>adult</u> members of the				
	HH usually go to defecate				
Q14a	On the ground	2%	43%	93%	80%
Q14b	In a water body	0%	1%	1%	0%
	In your own latrine	97%	-	-	-
	In a neighbour's latrine	0%	-	6%	-
	In a public latrine	0%	59%	0%	21%
	Location where <u>child</u> members of the				
	HH usually go to defecate [1]				
Q14c	On the ground	9%	50%	94%	90%
Q14d	In a water body	0%	0%	0%	0%
	In your own latrine	91%	-	-	-
	In a neighbour's latrine	0%	-	4%	-
	In a public latrine	0%	50%	1%	9%

^[1] Expressed as a percentage of all households that answered this question.

Table 15: Defecation Location in Urban Areas

Q	Description	Latrine Owners, n=228		No Latri	ne , n=162
		At home	Away from	At home	Away from
			home		home
	Location where <u>adult</u> members of the				
	HH usually go to defecate				
Q14a	On the ground	0%	8%	68%	69%
Q14b	In a water body	0%	0%	1%	0%
	In your own latrine	100%	-	-	-
	In a neighbour's latrine	0%	-	27%	-
	In a public latrine	0%	93%	3%	32%
	Other	0%	0%	0%	1%
	Location where child members of the				
	HH usually go to defecate [1]				
Q14c	On the ground	2%	26%	74%	77%
Q14d	In a water body	1%	1%	1%	0%
	In your own latrine	97%	-	-	-
	In a neighbour's latrine	0%	-	21%	-
	In a public latrine	1%	73%	3%	23%
	Other	0%	0%	0%	1%

^[1] Expressed as a percentage of all households that answered this question.

Latrine owners in both rural and urban areas almost always use their latrine for defecation when at home and when away from home they typically use a public latrine or, as a second choice, the ground. Almost all non-latrine owners in rural areas reported that they usually defecate on the ground with only a small proportion having access to a neighbour's latrine. Among non-owners in urban areas, approximately two-thirds used the ground and one-third used a neighbour's latrine when at home or a public latrine when away. Children followed a pattern similar to the adults but with a greater tendency to defecate on the ground.

Virtually no one reported that they defecate in a water body. This may have been influenced by the fact that the survey took place in the latter half of the dry season (March) when many seasonal water bodies had dried up.

Table 16: Anal Cleansing Material

Q	Description		Rural		oan
		Latrine	No Lat	Latrine	No Lat
Q14g	Percentage of respondents who use the following anal cleansing materials				
	Water	87%	11%	100%	36%
	Leaves	25%	83%	1%	59%
	Paper	16%	21%	7%	12%
	Other	0%	1%	0%	0%

Water was the most common anal cleansing material among latrine owners and leaves among non-owners. The percentages in each column sum to more than 100% because some respondents reported more than one material. "Other" materials reported by rural households without latrines included soil lumps, straw, and wood sticks.

5.2.4 Latrine Perceptions

Table 17: Latrine Advantages

Q	Description	Ru	ral	Url	ban
		Latrine	No Lat	Latrine	No Lat
Q15	Percentage of respondents who identified the				
	following advantages to owning a latrine (choices				
	were not read to respondents and respondents could				
	identify more than one advantage)				
	Improved hygiene/cleanliness	81%	71%	88%	70%
	More comfortable	66%	51%	71%	41%
	Improved health	73%	45%	59%	35%
	Improved safety	46%	42%	48%	45%
	Convenience/save time	49%	34%	44%	52%
	More privacy	41%	19%	38%	27%
	Improved status/prestige	16%	19%	11%	24%
	Other	6%	6%	0%	4%
	No advantages	1%	0%	0%	1%
	Don't know	0%	1%	0%	1%

The main benefits of latrine use mentioned by respondents included improved hygiene, comfort, health, safety, convenience, and privacy in that order. There was little difference between the order of benefits experienced by latrine owners and benefits perceived by non-owners. Seven respondents (two with latrines and five without) indicated a belief that latrines provide no advantages at all.

Table 18: Latrine Disadvantages

Q	Description	Ru	ral	Url	oan
		Latrine	No Lat	Latrine	No Lat
Q16	Percentage of respondents who identified the				
	following disadvantages to owning a latrine				
	(choices were not read to respondents and				
	respondents could identify more than one				
	disadvantage)				
	No disadvantages	77%	81%	83%	90%
	Bad smell	6%	5%	11%	4%
	Cost to maintain it	9%	5%	6%	1%
	Work to maintain it	5%	4%	5%	2%
	Attracts flies	1%	3%	4%	3%
	Other people come to use it	0%	3%	0%	0%
	Affects groundwater quality	1%	1%	0%	0%
	Other	6%	5%	11%	4%
	Don't know	3%	6%	0%	2%

The large majority of respondents believed that latrines do not pose any disadvantages. Smaller numbers expressed concerns over the bad smells and the cost/work for maintenance that they associated with latrines.

Table 19: Cost Perceptions

Q	Description	Ru	ral	Url	ban
		Latrine	No Lat	Latrine	No Lat
Q17	Percentage of respondents who claimed they could afford a latrine at the specified price either right away, at time of peak income, or after saving for less than 2 months				
	\$100	29%	10%	26%	13%
	\$80 \$60	39% 43%	13% 23%	34% 45%	14% 23%
	\$40 \$20	61% 65%	36% 53%	54% 62%	32% 47%
	Average amount that respondents would expect to pay for the latrines pictured in Annex D.				
	Latrine A (low end)	\$16	\$12	\$14	\$8
	Latrine B (medium)	\$42	\$29	\$41	\$27
	Latrine C (high end)	\$117	\$78	\$112	\$67

As would be expected, the perceived ability of respondents to pay for a latrine increased with decreasing latrine cost. Approximately 10% of both rural and urban non-latrine owners could afford a \$100 latrine while about 50% believed they could afford a \$20 latrine. These percentages were similar for both rural and urban non-latrine owners, which supports the earlier observation (Q7, Section 5.2.1) that cash income distribution is similar for both rural and urban non-latrine owners.

With regard to the sample latrines A, B, and C pictured in Annex D, cost estimates made by latrine owners were consistently higher than estimates by non-latrine owners. The latrine-owner estimates for the high-end latrine (Latrine C) were similar to the actual amounts paid by latrine owners for similar latrine designs (Q22, Table 12) suggesting that latrine owners have a more realistic expectations regarding latrine costs.

5.2.5 Latrine Purchase Decision

Table 20: Reasons for Purchasing or Not Purchasing a Latrine

Q	Description	Ru	ral	Url	oan
		Latrine	No Lat	Latrine	No Lat
Q19	Percentage of respondents who identified the				
	following reasons for purchasing a latrine				
	(choices were not read to respondents and				
	respondents could identify more than one reason)				
	Improved hygiene/cleanliness	83%	-	81%	-
	Improved health	67%	-	63%	-
	Convenience/save time	59%	-	57%	-
	Improved safety	53%	-	52%	-
	More privacy	46%	-	46%	-
	More comfortable	36%	-	32%	-
	Improved status/prestige	24%	-	15%	-
	Don't know	0%	-	0%	-
	Other	2%	-	0%	-
Q29	Percentage of respondents who identified the				
	following reasons for not owning a latrine				
	(choices were not read to respondents and				
	respondents could identify more than one reason)				
	Too expensive/don't have enough money	-	95%	-	95%
	Other priorities come first	-	19%	-	30%
	Satisfied with current practice/don't see a need	-	4%	-	4%
	Have access to someone else's latrine already	-	2%	-	0%
	Lack information on where to purchase a latrine	-	2%	-	0%
	Don't know	-	1%	-	2%
	Other	-	0%	-	0%

The main selling point of latrines for purchasers was improved hygiene/cleanliness. This was followed by improved health, convenience, safety, privacy, and comfort in that order. The reasons for purchasing a latrine are very similar to the actual benefits received from latrine use (Table 17) except that "improved comfort" ranked higher as a benefit (2nd) than as a reason for purchase (6th). Cost was the primary obstacle to purchasing a latrine followed by the precedence of other priorities. Other obstacles were only rarely mentioned.

Table 21: Place of Purchase

Q	Description	Rural		Url	oan
		Latrine	No Lat	Latrine	No Lat
Q20	Percentage of respondents who identified the	[1]	[2]	[1]	[2]
Q26	following place(s) where they purchased their latrine				
	or, in the case of non-latrine owners, where they				
	would purchase a latrine if they decided to buy				
	(choices were not read to respondents and				
	respondents could identify more than one place)				
	Local market dealers		64%	83%	61%
	Local craftsman	11%	13%	13%	13%
	NGO	16%	12%	5%	12%
	Built it yourself	13%	11%	7%	9%
	Other villagers	1%	2%	1%	1%
	Health Center	1%	0%	0%	0%
	Commune Council	1%	0%	0%	1%
	Village Development Committee	0%	0%	0%	1%
	Village Health Worker	0%	0%	1%	0%
	Other	8%	6%	4%	12%
	Don't know	1%	15%	5%	16%

 $[\]label{eq:local_sum} \textbf{[1] Sum} > 100\% \ \ because some latrine owners purchased different latrine components from different locations.}$

Local market dealers were the most common source of latrines both in terms of actual practice and expectations of potential purchasers. Local craftsmen, NGOs, and the self-build option were the next choices. Other options were mentioned only rarely.

Table 22: Decision Participant

Q	Description	Rural		iption Rural Urban		oan
		Latrine	No Lat	Latrine	No Lat	
Q25	Percentage of respondents who have thought about or	-	77%	-	76%	
	discussed purchasing a latrine					
Q23	Percentage of respondents who said that the					
Q27	following people participated or, in the case of non-					
	latrine owners, would participate in the decision to					
	purchase a latrine.					
	Adult male in household	87%	87%	89%	86%	
	Adult female in household	83%	83%	83%	85%	
	Children in household	0%	1%	2%	0%	
	Persons outside of household	2%	1%	1%	1%	
	Don't know	1%	6%	2%	8%	

Table 23: Purchase Arranger

Q	Description	Rural		Urban	
		Latrine	No Lat	Latrine	No Lat
Q24	Percentage of respondents who said that the				
Q28	following people arranged or, in the case of non-				
	latrine owners, would arrange the latrine purchase				
	(e.g., contact builder, negotiate price, purchase				
	materials, check quality, etc.)				
	Adult male in household	15%	69%	52%	35%
	Adult female in household	11%	35%	31%	17%
	Children in household	0%	0%	0%	0%
	Persons outside of household	0%	0%	0%	0%
	Don't know	0%	6%	1%	3%

^[2] Sum > 100% because some non-owners identified more than one place where they might purchase a latrine.

More than three-quarters of rural and urban non-latrine owners have considered a latrine purchase. In all cases, adult women and men were mentioned with equal frequency as participants in the purchase decision. Men, however, were approximately twice as likely to be the ones to arrange the purchase.

5.2.6 Information Channels

Table 24: Previous Sanitation Advice Received

Q	Description	Rural		Urban	
			No Lat	Latrine	No Lat
Q30	Percentage of respondents stating that they had				
	previously received the following sanitation				
	messages (choices were not read to respondents and				
	respondents could identify more than one message)				
	Drink safe water	80%	79%	78%	77%
	Use a latrine	66%	53%	61%	52%
	Wash hands/face/body	63%	60%	65%	62%
	Food hygiene	65%	60%	65%	56%
	Other	0%	0%	0%	1%
	None	14%	14%	19%	22%

The majority of respondents were aware of basic sanitation messages. The need to drink safe water was known by about 80% of all respondents while the other three messages (latrine use, washing, and food hygiene) were identified by about 50% to 65%. Latrine owners had slightly greater awareness than non-owners but the difference was small, as was the difference between rural and urban respondents.

Table 25: Source of Previous Sanitation Advice

Q	Description	Rural		Urban	
		Latrine	No Lat	Latrine	No Lat
Q31	Percentage of respondents who identified the following sources for previously received sanitation advice (choices were not read to respondents and				
	respondents could identify more than one source)				
	TV	61%	50%	69%	55%
	Health Center	35%	41%	29%	34%
	Own family	35%	24%	43%	30%
	Radio	32%	32%	31%	30%
	NGO worker	32%	28%	18%	27%
	Village Health Worker	21%	19%	8%	18%
	Schools/teachers	13%	13%	14%	14%
	Commune Council	8%	13%	11%	20%
	Village Development Committee	3%	8%	9%	12%
	Physician/nurse/pharmacist	11%	6%	3%	2%
	Other villagers	5%	2%	6%	5%
	Wat/religious leaders	2%	1%	2%	1%
	Newspaper/magazine	4%	0%	0%	0%
	Billboard	0%	0%	0%	0%
	Other	0%	0%	0%	0%
	Don't know	0%	2%	1%	1%

The most common source of sanitation advice was TV, especially among latrine owners. This was followed by health centers, family members, radio, NGO workers, and village health workers. The rank order of the top five sources for all population groups was identical. To put these figures in perspective, among latrine owners, 90% own a radio and 61% own a television and among those who do not own latrines, 41% own a radio and 63% own a television.

Table 26: Trustworthiness of Sanitation Information Sources

Q	Description	Ru	Rural		oan
		Latrine	No Lat	Latrine	No Lat
Q32	Trustworthiness index [1] for each of the following				
	sources of sanitation advice. Choices were read to				
	respondents.				
	Health Center	78%	75%	74%	64%
	Physician	72%	69%	71%	51%
	NGO	72%	66%	70%	65%
	Own family	62%	59%	67%	55%
	Schools/teachers	51%	47%	53%	45%
	Village Health Worker	49%	47%	47%	31%
	Commune Council	41%	44%	47%	38%
	Village Development Committee	38%	36%	37%	27%
	Pharmacist	37%	28%	39%	22%
	Wat/religious leaders	33%	31%	38%	20%
	Nurse	32%	30%	37%	20%
	Other Villagers	23%	22%	37%	19%
	Local market dealers	7%	1%	14%	3%
	Local craftsman	4%	-2%	10%	-1%

^[1] Percentage of respondents that rated the source as "very good" minus percentage of respondents that rated the source as "not good"

Respondents showed a high level of trust in Health Centers, NGOs, and physicians. The top six information sources were virtually identical for all population groups. Trust in market dealers and craftsmen was very low. (Note that the trustworthiness question addressed the trustworthiness of *people* as sources of information and thus media such as TV and radio were not included.)

Table 27: Media Habits

Q	Description	Ru	Rural		oan
		Latrine	No Lat	Latrine	No Lat
Q33	Percentage of respondents who stated that they listen				
	to radio				
	Daily	49%	41%	50%	37%
	Rarely/Never	37%	52%	46%	54%
Q34	Percentage of respondents who stated that they watch				
	TV				
	Daily	79%	56%	81%	65%
	Rarely/Never	13%	32%	12%	26%
Q35	Percentage of respondents who stated that they read				
	newspapers				
	Daily	1%	0%	5%	2%
	Rarely/Never	85%	91%	80%	91%

TV is the most common mass media accessed by all population groups with both the highest percentage of daily viewers and the lowest number of rarely/never users. As expected, latrine owners had better access to TV and radio than non-owners. Among non-latrine owners, urban respondents had more access to TV while rural respondents indicated slightly better access to radio.

5.2.7 Disability

Approximately 1 in 25 households in rural areas and 1 in 30 households in urban areas had a disabled family member. Disabilities included missing or problem feet/legs (62%), missing or problem hands/arms (28%), vision problems (10%), muteness (7%), and mental health problems (3%). Percentages sum to more than 100% due to multiple disabilities of some people.

The percentage of disabled people requiring assistance to defecate was about twice as high in urban areas (\sim 40%) as in rural areas (\sim 20%). The percentage of disabled people using a device to assist in defecation was also much higher in urban areas (50 to 60%) than in rural areas (0 to 20%). Assistance devices included mainly canes (55%) and bedpans (27%).

Table 28: Disability and Sanitation

Q	Description	Rural		Urb	an
		Latrine	No Lat	Latrine	No Lat
Q36	Percentage of households with a				
	disabled family member (out of total	4%	4%	2%	5%
	respondent households)				
Q39	Percentage of disabled people who				
	require assistance to defecate (out of	25%	19%	40%	37%
	total number of disabled people)				
Q40	Percentage of disabled people who use a				
	device to assist in defecation (out of	0%	20%	60%	50%
	total number of disabled people)				

5.3 Special Case Villages

The special case villages were included in the study under the hypothesis that their previous participation in a Community Led Total Sanitation (see Box 1) process may have influenced their knowledge, attitudes, and practice related to sanitary latrines. Thus, only questions related to knowledge, attitudes and practice have been summarized in Annex K. The special case village sample includes a total of 37 respondents from two villages, one in Kompong Speu and the other in Siem Reap. These were both rural villages and as such statistics for the special village sample are compared with the total rural sample population in the following discussion.

Box 1: Community Led Total Sanitation

Community Led Total Sanitation (CLTS) is an approach which aims to mobilize communities to completely eliminate open defecation. This is achieved through participatory facilitation and community led analysis and action. No hardware subsidies or instructions for latrine construction are provided. A facilitator raises awareness of the implications of open defecation and the links with ill health and facilitates any subsequent community actions. Community initiative and innovations are encouraged. With effective facilitation, CLTS can lead to significant decreases in the number of cases of diarrhea and dysentery in a period of weeks to months.

CLTS was introduced to Cambodia in 2004 by Concern Worldwide. Subsequent trials by the Ministry of Rural Development and UNICEF in Kompong Speu and Kompong Thom resulted in the approach being adopted by several organizations and extended to other provinces. Initial results at the time of this writing have been encouraging. Several villages have declared themselves open defecation free (ODF) and more than 1,300 households have built toilets – all without any material subsidies.

5.3.1 Consumer Profile

Table 29: Demographics in Special Case Villages

Q	Description	Special Case Village	
		Latrine No Latri	
		n=21*	n=16*
Q1	Average HH size	4.9	5.6
Q1b	Percentage of people (out of all people in respondent HHs) that are under 5 years old	5.1%	2.1%
Q1c	Percentage of female-headed HHs	10%	31%

^{*} Unless noted otherwise, sample sizes (n) for all Special Case Villages are as indicated here

Demographic characteristics of the special case sample are similar to that of the greater rural sample (see Table 2). The special case sample has a much higher percentage of latrine ownership with 57% of respondents owning latrines in the special case sample compared with 19% in the total rural sample.

Table 30: Incidence of Diarrhea in Special Case Villages

Q	Description	Special Case Villages	
		Latrine	No Latrine
Q1e	Percentage out of all people in respondents HHs that had at least one case of diarrhea in the past 2 weeks	6%	7%
Q1e	Percentage of under-5s (out of all under-5s) that had at least one case of diarrhea in the past 2 weeks	20%	25%

Special village respondents who owned latrines had a slightly lower incidence of diarrhea for adult household members and a higher incidence of diarrhea cases for under-fives. Cases of diarrhea for adults appears to be much higher in the special case samples than the total rural sample and slightly lower for under-5s (see Table 3).

5.3.2 Current Sanitation Practice

Table 31: Description of Existing Latrines in Special Case Villages

Q	Description	Special Case Vil	lages
Q12a	Below ground structure	Unlined pit	81%
		Offset tank	19%
Q12b	Slab type	Open hole-wooden slab	81%
		Pour flush	19%
Q12c	Wall material	Thatch	67%
		Concrete/brick	19%
		Galvanized steel	5%
		Salvaged material	5%
Q12d	Roof material	Thatch	67%
		Galvanized steel	29%
		No roof	5%
Q13	Average distance from house to latrine (m)		7.8m
Q21	Average age of latrine (time since installation)		1.3 years
Q22	Average cost of latrine (USD)		\$79

Table 32: Costs of Common Latrine Types in Special Case Villages

Below ground	Slab type	Shelter walls	Shelter roof	Percentage of latrine owners	Median Cost (USD)
(n=21)					
Offset tank	Pour flush	Concrete/brick	Galv. steel	19%	\$250
Unlined pit	Open hole in	Thatch	Thatch	57%	\$12
_	wooden slab				

Among households with latrines the most common design included an unlined pit, open holed-wooden slab, and thatched walls and roof. This design is simpler than those owned by rural households in the total population sample, who typically have offset tanks, pour flushes, concrete walls and galvanized steel roofs (see Table 12). On average, the latrines owned by the special village respondents were newer than those of the rural households in the total survey population, 1.3 years compared to 4.3 years. The latrines owned by the special village respondents were also less expensive than the rural households in the total survey population's latrines, although only slightly so (\$117 compared with \$127). The age and simple nature of the special village latrines is understandable in the context of the CLTS projects which provides no subsidy for latrine construction but encourages people to mobilize their own resources. As a result, more people appear to have constructed their own latrines using basic

materials. However, it is surprising that the special village latrines were only slightly less expensive, given their more basic design and materials.

Table 33: Defecation Location in Special Case Villages

Q	Description	Latrine		No L	atrine
		Home	Away	Home	Away
	Location where <u>adult</u> members of the HH				
	usually go to defecate				
Q14a	On the ground	5%	38%	100%	63%
Q14b	In a water body	0%	0%	0%	0%
	In your own latrine	100%	-	-	-
	In a neighbour's latrine	0%	-	0%	-
	In a public latrine	0%	71%	0%	44%
	Location where <u>child</u> members of the HH				
	usually go to defecate				
Q14c	On the ground	18%	76%	100%	100%
Q14d	In a water body	0%	0%	0%	0%
	In your own latrine	82%	-	-	-
	In a neighbour's latrine	0%	-	0%	-
	In a public latrine	0%	24%	0%	14%

Adults in the special villages have a higher likelihood of using a public latrine when away from home than rural adults in the total population sample – this is the case for both latrine and non latrine owners (see Table 14). When at home, defecation location for the special village respondents is similar to rural respondents in the total population sample.

5.3.3 Latrine Perceptions

Table 34: Latrine Advantages in Special Case Villages

Q	Description	Special Case Villages	
		Latrine	No Latrine
Q15	Percentage of respondents (out of all respondents) who identified the following advantages to owning a latrine (choices were not read to respondents and respondents could identify more than one		
	advantage) More comfortable	90%	88%
	Improved hygiene/cleanliness	76%	69%
	Improved safety	76%	50%
	Improved health	67%	31%
	More privacy	24%	13%
	Convenience/save time	14%	6%
	Improved status/prestige	5%	0%
	No advantages	0%	0%
	Don't know	0%	13%
	Other	0%	0%

No respondents felt that there were no advantages to using a latrine. In terms of preference, the special village respondents felt that latrines were more comfortable, that they improved hygiene and cleanliness, improved safety, and improved health, in that order. This is a similar range and order of advantages as those in the total rural sample (Table 17). Improved status or prestige was ranked higher by non owners in the greater rural sample than in the special village sample. This is possibly due to the fact that the higher prevalence of latrines makes ownership more commonplace with less prestige value.

Table 35: Latrine Disadvantages in Special Case Villages

Q	Description	Special Ca	ase Villages
		Latrine	No Latrine
Q16	Percentage of respondents (out of all respondents) who identified the following disadvantages to owning a latrine (choices were not read to respondents and respondents could identify more than one disadvantage)	67 0/	600/
	No disadvantages	67%	69%
	Bad smell	33%	6%
	Attracts flies	10%	6%
	Cost to maintain it	0%	0%
	Work to maintain it	0%	6%
	Other people come to use it	0%	0%
	Affects groundwater quality	0%	0%
	Don't know	0%	13%
	Other	0%	0%

Most of the special village respondents found no disadvantage to latrine ownership. However, compared to the general rural population group (Table 18), more of them were able to identify disadvantages, including bad smells and flies. This could be due to the higher proportion of low-end latrines owned in the special case sample, especially the lower prevalence of pour-flush slabs, and/or a higher awareness among respondents of the advantages and disadvantages of latrine ownership gained through the CLTS projects.

Table 36: Cost Perceptions in Special Case Villages

Q	Description	Special Case Villages	
		Latrine	No Latrine
Q17	Percentage of respondents (out of all respondents) who claimed they could afford a latrine at the specified price (USD) either right away, at a time of peak income, or after saving for less than 2		
	months	1.50/	60/
	\$100	15%	6%
	\$80	15%	6%
	\$60	29%	6%
	\$40	38%	32%
	\$20	53%	56%
Q18	Average amount that respondents would expect to pay for the		
	latrines pictured in Annex D		
	Latrine A (low end)	\$10	\$7
	Latrine B (medium)	\$23	\$13
	Latrine C (high end)	\$93	\$32

As expected, and as observed in the greater rural sample, the perceived ability of special village respondents to pay for a latrine decreases with increasing latrine cost. A little more than half of latrine owners and non-owners reported that they could afford to purchase a \$20 latrine, while 15% of latrine owners and 6% of non latrine owners could afford a \$100 latrine. Special village respondents generally indicated a lower ability to pay for latrines than rural respondents in the total study population (see Table 19). Furthermore, special village respondents had notably lower expectations of price than rural respondents in the total study population. This may be due to the fact that the special case villages are more likely to own lower-end latrines, where materials may have been salvaged locally with little interaction with commercial latrine makers and retailers. Furthermore, as mentioned previously, the CLTS projects focused on the cessation of open defecation within the village. There was no emphasis on latrine technology, construction, or purchase and it would not necessarily be expected for respondents to have a greater awareness of these issues after taking part in the CLTS projects.

5.3.4 Latrine Purchase Decision

Table 37: Reasons for Purchasing or Not Purchasing a Latrine in Special Case Villages

Q	Description	Special Ca	ase Villages
		Latrine	No Latrine
Q19	Percentage of respondents (out of all respondents with latrines) who identified the following reasons for purchasing a latrine (choices		
	were not read to respondents and respondents could identify more than one reason)		
	Improved hygiene/cleanliness	67%	-
	Improved health	62%	-
	More privacy	38%	-
	Improved safety	38%	-
	Convenience/save time	33%	-
	More comfortable	14%	-
	Improved status/prestige	10%	-
	Don't know	0%	-
	Other	0%	-
Q29	Percentage of respondents (out of all respondents without latrines)		
	who identified the following reasons for not owning a latrine		
	(choices were not read to respondents and respondents could		
	identify more than one reason)		
	Too expensive/don't have enough money	-	88%
	Satisfied with current practice/don't see a need	-	6%
	Have access to someone else's latrine already	-	0%
	Lack information on where to purchase a latrine	-	0%
	Other priorities come first	-	0%
	Don't know	-	13%
	Other	-	0%

The majority of respondents purchased a latrine for reasons of improved hygiene, health, safety, privacy, and convenience. This closely mirrors the responses from the total survey population (Table 20). The primary obstacle for respondents in the special villages to purchasing a latrine was the same as that for the total survey population, that of expense. Other obstacles were rarely mentioned.

5.4 Focus Group Discussions

Focus Group discussions were held with one rural and one urban group in each of the study provinces to provide a deeper understanding of respondents' perceptions of sanitation and latrine use. In total, six focus group discussions were held with a total of 44 participants (Annex I). Each group had eight participants, except for the Kandal rural focus group, which had only four participants due to a miscommunication regarding meeting time. Participants were selected after the questionnaire interviews had taken place and were chosen based on the Survey Team's assessment of their specific interest, knowledge and ability to contribute to a group discussion. All discussions were lead by the same Facilitator using a discussion guideline for greater consistency. The discussion guideline is included in Annex E and discussion summary tables are presented in Annex F.

5.4.1 Attitude towards Latrines

All focus group participants felt that using a latrine was part of good sanitation and health practices. Identified advantages of having a latrine were very similar across the six groups and there was little difference between urban and rural responses. Furthermore, advantages identified followed an order of preference similar to the household questionnaire results (Table 17).

Advantages of latrines according to Focus Group Participants included:

- Good sanitation
- Convenient- saves time having to walk to paddy field

- Good for guests
- Provides privacy for family

The majority of respondents said that they felt inconvenienced when visiting the houses of friends and family without a latrine. They felt that it was awkward and that they would not stay long and return home quickly. This sentiment was particularly strong amongst those who already owned latrines. However, some rural respondents said that as they were accustomed to not having a latrine, and that it was the norm amongst their family and friends, it did not affect them.

5.4.2 Current Practice

Respondents who do not have a latrine said that they went to the rice field to defecate; some urban respondents also said that they use their neighbors latrine. Rural respondents said that a latrine is sometimes available in town, at the pagoda and at schools. Many respondents noted that it was difficult in rainy season when the rice fields flood. In general, participants were shy about using rice fields and were embarrassed when visitors came. Urban respondents also pointed out the difficulty in finding appropriate places to defecate where there is little forest or rice paddies.

Respondents who did not have latrines said that this was not because they did not want a latrine, but because they did not have enough money. Many of these respondents said that they have a temporary pit during wet season as the rice fields flood. The great majority of respondents who did not have a latrine said that this had been the case since 1979 (the end of the Khmer Rouge era).

Focus Groups were shown pictures of three types of latrine (see Annex D) and asked whether they would build a temporary latrine (image-A). Respondents said they do not want a latrine like image-A, as it is not good or attractive. They said they would prefer to wait for a better option. One rural Svay Rieng participant said "If we built the latrine in image-A, it seems useless as it can be used for a short time only. It will be removed immediately when have enough money to buy better latrine."

Many respondents who did have latrines said that they were not satisfied with their latrine as it was temporary or did not have all the characteristics they wanted. Once again, this was due to not having enough money to improve their latrine. Urban respondents said that they built their latrine because they live in town and there is no open space or rice fields in which to defecate. Some respondents said that they were shy to keep using the rice field and one said that as his parents were becoming older he wanted a latrine for their and his family's convenience.

5.4.3 "Ideal Latrines" and Price Perceptions

Conceptions of the "ideal latrine" differed amongst rural and urban groups. The table below lists the different characteristics identified by area.

	R1	R2	U1	U2
	preferred by most	preferred by some	preferred by most	preferred by
	rural respondents	rural respondents	non Phnom Penh	Phnom Penh
			urban respondents	respondents
Below ground	Concrete lined pit	Offset tank	Offset tank	Concrete lined pit,
structure				or sewage pipe
Pan	Ceramic water seal	Concrete	Water seal	Water seal
Walls	Concrete	Brick	Brick	Brick
Roof	Tile/fibro		Tile	Tile
Extras	Water basin		Water basin and	Ceramic floor
			shower	
Perceived cost	\$200	\$150-\$200	\$500-\$700	\$150-\$200

When asked what they thought their 'ideal latrine' would cost, the majority of rural respondents thought that the *R1* latrine would cost 200 USD and the *R2* latrine would cost \$150 to \$250 USD. There was a significant difference in price perceptions among urban respondents, who felt that their

'ideal latrine' would cost much more than rural respondents. The *U1* latrine was thought to cost \$500 by the majority of respondents, although three respondents in Siem Reap who had chosen this latrine differed and thought \$600 to \$700 USD. The Phnom Penh focus group thought that their *U2* latrine would cost \$150 to \$200 USD, although one respondent disagreed and said that as his current latrine cost him \$250 that a *U2* latrine would be much more than this.

5.4.4 Attitudes towards Subsidization

Table 39: Ability to Pay for Ideal Latrine

Cost of Ideal Latrine	Response	
\$100	Yes, immediately (7 responses)	
	After one year of saving (majority)	
	After 3 to 6 months of saving (some)	
	No, not enough money (4 responses)	
\$50	Yes, within one week (majority)	
	After 3 to 4 months of saving (some)	
	No, not enough money (3 responses)	
\$25	Yes (all)	

Respondents were asked that if their ideal latrine was on special or subsidized so that it cost \$100 would they be able and willing to buy this latrine. The majority of respondents said they would buy this latrine but not straight away, they would need time to save. Many respondents said that they would need up to a year to save; some respondents said that they could purchase this latrine within three to six months. In total, seven respondents said that they would buy this latrine immediately and four respondents said they would not buy this latrine at all as they did not have enough money.

Groups were then asked whether their responses would change if the cost of the latrine was reduced further to \$50. The majority of participants said they would purchase this latrine within the week, but that they would need to see this latrine before purchasing. Some respondents still said that they would need three to four months to save for this purchase and a few respondents said they could not pay \$50 but could purchase if it was for \$25.

The participants were told a story about an NGO that built latrines for villagers in Kratie. A few months after the latrines were built the villagers stopped using them due to difficulties carrying water. All focus groups said that they would continue to use the latrine despite difficulty. Some village chiefs in the focus groups also provided examples from their experiences. They highlighted the importance of latrines being privately owned, proper education regarding use and maintenance being provided and selection of only villagers who are willing and have the money to take part. One Rural Svay Rieng village chief said: "It is a bad habit in Cambodian rural areas that many villagers want to get everything free from an NGO".

5.4.5 Purchasing Decisions

It was agreed among all focus groups that they would discuss the decision to buy a latrine with their family before purchasing to avoid any potential conflict within their families. It was generally felt that the wife and husband should go to the market together, the wife to bargain for the latrine components and the husband to assess the quality. Although some respondents said that the husband could go to the market by himself. This was particularly the case for the Phnom Penh group who believed that it was a waste of time for both husband and wife to go together. All groups agreed that the husband, and perhaps children, would implement the project. Although some conceded that where it was a very big job the wife would also assist.

All focus groups agreed that they would consult neighbors who had already purchased latrines. They would ask how to build a latrine and the best locations to purchase. However, most respondents said that they would make their decision based on price and not necessarily follow neighbor's recommendation. In Phnom Penh, it was felt that all latrine makers provide the same service.

Most respondents who already own latrines said that they bought the materials from the market (not necessarily buying all components from the same retailer) and then built the latrine by themselves. Some respondents, especially those in Phnom Penh, hired a mason to build their latrine.

Respondents were asked if they might spend more than they planned if, when arriving at the store, they saw materials of better quality but higher price. The majority said that they would not buy these materials, as they did not have enough money to buy a more expensive option or they needed to stick to the plan as agreed by their family. Five respondents from the rural focus groups said that they would consider purchasing these materials if they were of a higher quality and the price was only slightly higher.

5.4.6 Advertising and Information Regarding Latrines

Table 40: Who is Best Suited to Educate Villagers about Latrines and Health?

Rural	Urban
Village Chiefs, elders and pagoda leaders	Television
Physicians	NGOs and physicians
Health workers and civil servants	Village chiefs and commune councilors

When asked who is best suited to educate villagers about latrines and health, rural groups felt that village chiefs, respected elders and pagoda leaders could educate villagers. They also felt that physicians could conduct direct training in villages. Some rural respondents felt that health workers and civil servants could provide this education, but that it was important that programs were followed up otherwise villagers would not implement teachings.

Urban groups felt that television was the best source for health education. They also suggested NGOs and physicians to educate villagers directly and also village chiefs and commune councilors. There was agreement that masons/builders would not be appropriate as people would not trust their motives; as soon as an education program is perceived to have commercial aims it will not be trusted.

When asked about who would be most suitable to perform in television and radio education programs there was a clear split between Phnom Penh groups and the other focus groups. The Phnom Penh group believed that popular comedians would be best; they felt these comedians could attract large audiences and enable learning about health in a fun way. Another focus groups felt strongly that audiences would not believe comedians and TV stars and that real people were best to perform in these programs. A commonly expressed opinion was captured by one urban, Siem Reap participant: "Audiences will believe when ordinary people perform because it seems to show a real situation." One rural respondent suggested children should be actors, as they are most vulnerable to diseases and another conceded that comedians could perform but they must wear physicians dress to be believed.

Rural focus groups emphasized that the message must be clear and simple, otherwise viewers will not understand the educational message. In the rural Siem Reap focus group, it was felt by some that it was not a good idea to use television to broadcast these messages as many people do not have access to television and have low education, as such they need to listen to trainers directly.

5.4.7 Media Habits

The majority of respondents said that they watch television, with CTN clearly the most popular channel. Participants said that they usually watch television at noon and in the evening. Most participants listen to radio, with peak listening times at noon and evening. Some respondents indicated they do not listen to radio due to broken radio sets or a preference for television. Almost all participants do not read newspapers or magazines as they are too expensive and they do not have enough time. One Siem Reap participant said it is "useless to advertise in magazines as there are very few people who read magazines in Siem Reap."

6 CONCLUSIONS

This study confirms the prior expectation that latrine owners tend to be better-off than non-owners. This is evident in survey results showing that latrine owners tend to have higher net annual cash incomes, more assets, better roofs on their houses, better access to improved water sources, and larger landholdings that are more likely to be titled and less likely to be subject to annual flooding (Table 4 - Table 10). Latrine owners also reported a willingness to pay higher amounts for a latrine (Table 19). Furthermore, in comparison with latrine owners, non-owners tend to have less education and include a higher proportion of female-headed households. Household size is similar for both owners and non-owners, but non-owner households tend to have a younger average age and more children under the age of five (Table 2).

Although cost is the obstacle most commonly cited for not yet owning a latrine (Table 20), it is clear that it is not the only barrier to latrine ownership. Firstly, latrine ownership exists among the poorest quintile of the survey sample and non-ownership is common among those in the highest quintile (Table 8). Thus, some very poor households have managed to purchase a latrine while many better-off households have not done the same. Secondly, about 50% of non-owners claimed that they can afford a \$20 latrine, which is more than the average perceived cost of a low-end latrine (Table 19). These points imply that many non-owners (rich ones certainly, and likely some poor ones also) can afford a low-end latrine but have not yet purchased one. Obstacles other than cost must therefore be playing a role in the overall low level of latrine coverage.

One such obstacle, as noted in the focus group discussions, is an unwillingness to invest in low-end latrines, which are considered unattractive and likely to last only a short time. There appears to be a strong cultural perception of an "ideal latrine" consisting of an offset tank, pour-flush pan, and solid walls and roof. A large majority of existing latrines fit this description (Table 12) and the preference for this latrine type was confirmed, with some variations, in the focus-group discussions. This perception is reinforced by the prevalence of the "ideal" design among existing latrines and the lack of alternatives for people to see in the marketplace and in use. Focus group participants expressed a reluctance to purchase anything less than the ideal latrine, preferring instead to wait until they could afford a better latrine. High-end expectations appear to be clashing with low ability to pay resulting in delayed purchase decisions. It may be possible to overcome this obstacle through introduction and demonstration of lower cost but acceptable design alternatives.

The survey results indicated a generally high level of awareness of hygiene issues. The majority of respondents (60-80%) were able to name basic sanitation messages, with little difference between latrine owners and non-owners or rural and urban respondents (Table 24). Hygiene awareness translated into hygienic practice in the case of water treatment, with the majority of respondents (68-95%) reporting that they treated their drinking water sometimes or always (Table 11). If hygiene awareness leads to improved water treatment behaviours, why then does it not lead to improved sanitation behaviours in most cases? Further investigation of the conceptual links between hygiene, health, and latrine use may yield a better understanding.

The perceived advantages of latrine use reported by non-owners and owners were nearly identical with hygiene/cleanliness, comfort, health, convenience, safety, and privacy all being mentioned by at least a third of respondents (Table 17). These reported advantages were also very similar to the motivations for purchasing a latrine (Table 20). This suggests that non-owners have a good understanding and realistic expectations of the benefits they are likely to receive if they purchase a latrine. The prominent ranking of hygiene and health is in contrast to a previous study in Cambodia in which they ranked lower as perceived benefits and motivations for building a latrine.

A number of differences were noted between the general rural population and the two special case villages that had been through a Community-Led Total Sanitation (CLTS) process. Households in the special villages were more likely to own lower-end latrines (Table 31), respondents estimated lower costs for latrine designs (Table 36), latrine owners were able to identify more disadvantages to latrine

⁴ Mukherjee, N., Learning What Works for Sanitation: Revisiting Sanitation Successes in Cambodia, WSP-EAP, July 2002

ownership (Table 35), and there was a greater tendency for adults to use latrines when away from home (Table 33). These differences are consistent with the CLTS process, which raises awareness about sanitation issues and encourages communities end open defecation using their own resources without any hardware subsidies.

ANNEX A: VILLAGE LEVEL QUESTIONNAIRE (ENGLISH)

Sanitation Demand Survey Village Information Questionnaire

Village Name Commune Name District Name Province Name 1. Interview Team 2. 3. Person(s) interviewed to fill in this questionnaire Date of Village Visit Arrive Depart	Questionnaire number				
District Name Province Name 1. Interview Team 2. 3. Person(s) interviewed to fill in this questionnaire Date of Village Visit Arrive	Village Name				
Province Name 1. Interview Team 2. 3. Person(s) interviewed to fill in this questionnaire Date of Village Visit Arrive	Commune Name				
Interview Team 2. 3. Person(s) interviewed to fill in this questionnaire Date of Village Visit Arrive	District Name				
Interview Team 2. 3. Person(s) interviewed to fill in this questionnaire Date of Village Visit Arrive	Province Name				
Date of Village Visit Arrive	Interview Team	2.			
	Person(s) interviewed to fill in this questionnaire				
Depart	Date of Village Visit	Arrive			
d d m m v v		Depart			

No	Question	Coding	Skip
Q1	Number of households in village	Households	
Q2a	Number of people in village	Women	
Q2b		Men	
Q2c		Total	
Q3	Number of latrines in the village	Latrines	
Q4a	Number of latrine owners interviewed	Latrine owners	
Q4b	Number of non latrine owners interviewed	Non-latrine owners	
Q5a	Distance to nearest commune level market	km	
Q5b	Distance to nearest district level market	km	
Q5b	Distance to nearest province level market	km	

No	Question	Coding	Skip
Q6a	Has there ever been an NGO project active in this village?	Yes	→ End
Q6b	Which NGO (or NGOs)?		
Q6c	What type of development activities did the project(s) include? [check all that apply]	Drinking water supply	
Q6d	Year NGO activities started		
Q6e	Are NGO activities still ongoing?	Yes	
Q6e	Year NGO activities ended		

Other Comments:

ANNEX B: HOUSEHOLD LEVEL QUESTIONNAIRE (ENGLISH)

Sanitation Demand Survey Household Questionnaire

Villag	e name				Ques numb	tionnaire		
Comm	nune name					ondent name		
Distric	ct name				Resp	ondent age		
Provin	nce name					ondent sex	M/F	
Intervi	iewer name					of Interview	dd mm2	2006
HOUS	SEHOLD MEM	IBERS						
	Q1a		Q1b	Q1c	;	Q1d	Q1e	
No	Relation t household h		Age	Sex		Years of Education	How many times has had diarrhea in the pa	
1	Household he	ad		☐ M/F				
2				☐ M/F				
3				☐ M/F				
4				☐ M/F				
5				☐ M/F				
6				☐ M/F				
7				☐ M/F				
8				☐ M/F				
9				☐ M/F				
10				☐ M/F				
		l		I			- 1	
	OECONOMIC	2						
No	Question					Coding		Skip
Q2a	Do you own agricultural land? ?			Yes		→ Q3a		
Q2b	How much agricultural land area did your household own in the last 12 months?		ır	hec				
Q3a	Do you own your residential land?				Yes			
Q3b	Do you have official title for your residential land?			ntial				

Q3c Q4	Is your residential land flooded regularly Roof construction material	Never	
	[Check one. If more than one roof material is used, choose material that covers the largest area]	Galvanized steel	
Q5	Does your household own any of the following items? [Check all that apply]	Plough	
Q6	What items did you spend money on in the last 12 months? [Rank all items from 9 to 1. The largest annual expense is 9, the second largest is 8, and so on. If there was no expenditure enter zero.]	Food	

Q7	What was your cash income from all household members and from all sources in the past 12 months? [Fill in net annual income (riels) from each source]	Selling rice
Q8	In what month(s) do you have the highest income? [Check all that apply]	January
WATE	R SUPPLY	, · · · , · · · · · · · · · · · · · · ·
Q9a	What is your main source of domestic water in the wet season? [Domestic water includes water for drinking, washing and other household uses] [Check one main source only]	Rainwater
Q9b	What is your main source of <u>domestic water</u> in the <u>dry</u> season? [Check one <u>main</u> source only]	Rainwater

Q10a	Do you treat your <u>drinking</u> water?	Always	→ Q11
Q10b	What method do you use to treat your drinking water?	Boil	
LATRI	NE USE		
Q11	Do you own a latrine?	Yes	→ Q14a
Q12a	What kind of <u>below ground</u> structure does your latrine have? [Check one]	Unlined pit	
Q12b	What kind of slab does your latrine have? [Check one]	Open hole – wooden slab	
Q12c	What kind of shelter walls does your latrine have? [Check one. If more than one wall material is used, choose material that covers the largest area]	Concrete/brick	
Q12d	What kind of shelter roof does your latrine have? [Check one. If more than one roof material is used, choose material that covers the largest area]	Concrete	
Q13	How far is the latrine from your house?	meters	

Q14a	Where do <u>adult</u> members of this household usually go to defecate when <u>at home</u> ?	On the ground	
Q14b	Where do <u>adult</u> members of this household usually go to defecate when <u>away from home</u> ?	On the ground	
Q14c	Where do <u>children</u> in this household usually go to defecate when <u>at home</u> ?	On the ground	
Q14d	Where do <u>children</u> in this household usually go to defecate when <u>away from home</u> ?	On the ground	
Q14e	[If children defecate in a different place than adults] Why do children use a different place than adults?		
Q14f	[If there is an infant in the household] Where do you dispose of infant feces?	On the ground	
Q14g	What do members of this household normally use to clean their anus after defecating?	Water	

LATRINE PERCEPTIONS

		22 220118						
Q15		ondent owns a l			_	Improved hygiene/cleanliness		
				_	Improved health			
	ratific:				_	mfortable		
	[If respe	ondent does no	t own a latrine]			ence/save time	_	
			ald be the <u>advantag</u>	ges of		d safety		
		your own latrir		505 01	_	d status/prestige		
					_	ntages		
	[Do not	read options; d	check all that appl	y]		10W	_	
						pecify)	_	
					o tilei (b)			
Q16	[If respo	ondent owns a l	latrine]		Bad sme	:11		
			ages of owning yo	our	Attracts	flies		
	own latr				Cost to 1	naintain it		
					Work to	maintain it		
			t own a latrine]		Other pe	ople come to use	it	
			ıld be the disadvar	ntages	Affects groundwater quality			
	of owning	ng your own la	trine?		No disadvantages			
	(D)	7			Don't know			
	[Do not read options; check all that apply]			Other (specify)				
Q17		- -	a latrine at the foll	owing	prices? [C	heck one box for	each price]	
	Price	Can afford	Can afford at		afford by Can afford by Can never			
		anytime	time of peak		ng for 2	saving for	afford	
			income (e.g., after harvest)	less	ths or	more than 2 months		
	\$100		arter narvest)	1033		monuis		-
	\$80							-
	\$60							_
	\$40							_
								-
	\$20							
Q18	Q18 [Show respondent picture of four types of latrines]*		f		ype A ype B			
				Latrine t	ype C	R		

^{*}See Annex D

LATRINE PURCHASE

	[Does the respondent have a latrine?]	Yes	→ Q19 → Q25
Q19	What made you decide to purchase a latrine? [Do not read options; check all that apply]	Improved hygiene/cleanliness	
Q20	Where did you purchase/receive your latrine? [Do not read options; check all that apply]	NGO	
Q21	When did you purchase your latrine?	year	
Q22	How much did you pay for your latrine? [Enter value in Riel or US\$]	Riel	
Q23	Who participated in the decision to purchase your latrine? [Check all that apply]	Adult male in household	
Q24	Who arranged the latrine purchase? (e.g. contacted builder, negotiated price, purchased materials, checked quality, etc.) [Check all that apply]	Adult male in household	
	[Go to next section]		→ Q30
Q25	Have you ever thought about or discussed purchasing a latrine?	Yes	

026		NGO -	
Q26	If you decided to purchase a latrine, where	NGO	
	would you go to purchase it?	Health Center	
		Commune Council	
	[Do not read options; check all that apply]	Village Development Committee	
		Village Health Worker	
		Local craftsman	
		Local market dealers	
		Other villagers	
		Build it yourself	
		Don't know	
		Other (specify)	
Q27	If you decided to purchase a latrine, who	Adult male in household	
	would participate in the decision?	Adult female in household	
		Children in household	
	[Check all that apply]	Person(s) outside of household	
		Don't know	
Q28	If you decided to purchase a latrine, who	Adult male in household	
	would arrange the purchase? (e.g. contact	Adult female in household	
	builder, negotiate price, purchase materials,	Children in household	
	check quality, etc.)	Person(s) outside of household	
		Don't know	
	[Check all that apply]		
Q29	Why don't you own a latrine?	Too expensive/don't have enough	
		money	
	[Do not read options; check all that apply]	Have access to someone else's latrine already	
		Satisfied with current practice/don't see a need	
		Lack information on where to purchase	
		a latrine	
		Other priorities come first	
		Don't know	
		Other (specify)	
		outer (specify)	

INFORMATION CHANNELS

Q30	What sanitation advice have before? [Do not read options; check]		Use a latri Wash han Food hygi Other (spe	e water neds/face/body eneene		→ Q33a
Q31	What was the source of the sanitation advice?			ly		
	[Do not read options; check all that apply]			Other villagers		
Q32		Other (specify) e following would be able to give trustworthy/useful and latrines? [Check one box for each source] Very good Somewhat Source of good source source of sanitation of sanitation sanitation				
	Own family	information	information	information		
	Other villagers					
	NGO					
	Health Center					
	Physician					
	Nurse					
	Pharmacist					
	Village Health Worker					
	Commune Council					
	Village Development Committee Schools/teachers					
	Wat/religious leaders					
	Local craftsman					
	Local market dealers					

Q33a	How often do you listen to the radio?	Daily	
Q33b	What radio station do you usually listen to?		
Q34a	How often do you watch TV?	Daily	
Q34b	What TV station do you usually watch?		
Q35a	How often do you read newspapers?	Daily	
Q35b	What newspaper do you usually read?		

DISABILITY

Q36	Are there any disabled people in this household?	Yes	→ Q37 → End
Q37	Which household member? [Enter person's number from the Household Member table on the first page of this questionnaire]	Household member number	
Q38	Describe the disability		
Q39	How is this person able to defecate?	Assisted	
Q40	Does this person use any device to assist them to defecate?	Yes	→ Q41 → End
Q41	Describe the device		

Other Comments:

ANNEX C: HOUSEHOLD LEVEL QUESTIONNAIRE (KHMER)

អាស្នេចំមតិលើតម្លេចការ ខ្លែកអនាម័យ បញ្ជីសំនូរសំរាច់គ្រួសារនិមួយៗ

អ**ន្តសញ្ញា**រលង្ខេខែ១ពរ្តិសំនូ៖

ឈ្មោះភូមិ	លេខបញ្ជីសំនួរ	
ឈ្មោះឃុំ	ឈ្មោះ អ្នកឆ្លើយសំនួរ	
ឈ្មោះស្រុក	អាយុ អ្នកឆ្លើយសំនួរ	
ឈ្មោះខេត្ត	ភេទ អ្នកឆ្លើយសំនួរ	□ ប/ស □
ឈ្មោះអ្នកសំភាសន៏	ថ្ងៃខែ សំភាសន៏	ថ្ងៃខែ2006

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	—				
	9 ñ	9 8	9 ជ	9 W	9ង
លរ	ទំនាក់ទំនងនឹង	អាយុ	ភេទ	ក៏វិតសិក្សា	តើមនុស្សនេះមានការរាគរួសប៉ុំនា្មន
	មេត្រួសារ				ដងក្នុងកំឡុងពេលពីរអាទិត្យចុង
					ក្រោយនេះ ?
1	មេគ្រួសារ		□ ប/ស □		
2			□ ប/ស □		
3			ប/ស		
4			ប/ស		
5			ប/ស		
6			្រា ប/ស ្រា		
7			ប/ស		
8			ប/ស		
9			ប/ស		
10			្រា ប/ស្រ		

សេដ្ឋគិច្ចសទ្ឋម

លរ	សំនួរ	ចម្លើយ	រំលងទៅ
២ក	តើអ្នកមានដីធ្វើកសិកម្ម រឺទេ ?	មាន	
		គ្មាន	→ ៣ក
២ខ	តើ ទំហំផ្ទៃដីកសិកម្មចំនួនប៉ុនា្លនដែលជា កម្ម	ហិកតា	
80	សិទ្ធរបស់គ្រួសារអ្នក ក្នុងពេល ១២ ខែ ចុង	UIIIBII	

	ក្រោយនេះ ?		
៣ក	តើអ្នកជាម្ចាស់លំនៅដ្ឋាននេះផ្ទាល់ ?	ប្រទ	
		ß	→ ៣ គ
៣ខ	តើអ្នកមានប័ណ្ណកម្មសិទ្ធលើលំនៅដ្ឋានស្រប	មាន	
NI O	ច្បាប់ រឺទេ ?	គ្នាន	
៣គ	តើដីលំនៅដ្ឋានមានដែលលិចទឹកដែរ រឺទេ ?	មិនដែលទេ	
		ធ្លាប់ដែរ	
		លិចរាល់ឆ្នាំ	
G	ដំបូលផ្ទះអ្នក ធ្វើអំពីអ្វី ?	បេតុង	
ט	(សូមតូសយកតែមួយ ប្រសិនបើ ដំបូលប្រក់	ប្វីប្រូ	
	ដោយសំភារៈចំរុះច្រើនមុខសូមគូសយកត្រង់កន្លែង	សង្កស៊ី	
	សំភារៈណាដែលបានច្រើច្រើនជាងគេ)	ក្ប្រឹង	
		์ ที่ ที่	
		កៅសូតង់	
		សំភារៈសំណល់	
		ផ្សេងៗ - បញ្ជាក់	
of	តើគ្រួសារអ្នកមាន របស់របរ ទាំងនេះវឺទេ ?	ន័ងគាល់	
ក្	[គូសរាល់ចំឡើយដែលបានឆ្លើយ]	រនាស់	
		រទេះគោ	
		គោយន្ត	
		ត្រាក់ទ័រ	
		ស្នប់សប់ទីក	
		ម៉ាស៊ីនបូមទឹក	
		ម៉ាស៊ីនកិនស្រូវ	
		ម៉ាស៊ីនបោកស្រូវ	
		គោ ក្រប៊ី	
		ជ្រូក	
		ឡាន	
		ម៉ូតូ	
		កង់	
		gñ	
		កាណូត	
		ទូរស័ព្ទ	
		ក្បាលចាក់ VDO	

		ទូរទស្ស	
Ъ	តើ របស់របរ អ្វីខ្លះដែលអ្នកបានចំណាយប្រាក់ ទិញវាក្នុងកំឡុងពេល ១២ ខែ ចុងក្រោយនេះ? ដោក់ពិន្ទុ ពី ៩ ទៅ ១ ទៅតាមការចំណាយប្រចាំឆ្នាំ ពីច្រើនជាង ទៅ តិចជាង(9,8,7) ប្រសិនបើគ្មាន ចំណាយសោះ ដាក់ពិន្ទុ អោយ O) ។	អាហារ	
៧	តើប្រាក់ចំណូលរបស់សមាជិកគ្រូសារនៅក្នុងផ្ទះ នេះបានមកពីប្រភពណាខ្លះក្នុងរយៈពេល១២ ខែកន្លងមកនេះ? (កត់បញ្ចូលប្រាក់ចំណូលពិតប្រចាំឆ្នាំជារ្យេល ពីប្រភពទាំងអស់ដែលគេបានឆ្លើយ)	លក់ស្រូវ	
ផ	តើនៅខែណាខ្លះដែលអ្នកមានប្រាក់ចំណូលខ្ពស់ ជាងគេ? (សូមគូសគ្រប់ខែ ដែលគេបានឆ្លើយ)	មករា កុម្ភ: មិនា មេសា	

		260371 □ 市贷部 □ 市贷計 □ 市价则 □ 市价则 □ 市价 □ 市价 □ 3 г дн □	
		ធ្នូ	
		និមួយ១ ពេញមួយឆ្នាំ	
វិទ្ធឧបន្	វ៌ភ		
ද් ෆි	នៅដូវវស្សា តើអ្នកយកទឹកមកពីប្រភព ណាមួយដើម្បីប្រើប្រាស់?	ទឹកភ្លៀង 🗆 ទឹកស្ទឹង/ទន្លេ 🗆 ទឹកស្រះ	
	(ប្រភពទីក គឺរួមបញ្ចូលទឹកសំរាប់ផឹក របាកគក់ និង	ร์ รึกซึ่น	
	ការប្រើប្រាស់ក្នុងផ្ទ ំ)	អណ្តូងខួង(អណ្តូងស្នប់) 🗌	
	(យកចម្លើយតែមួយប៉ុណ្ណោ៖)	អណ្តូងជីក 🗆 អណ្តូងលូ គ្មានគំរប់ 🗆	
		អណ្តូងលូ មានគំរប់	
		ទិញទឹកដប 🗆 ទឹកបណ្ដាញម៉ាស៊ីន	
ද ව	នៅរដូវប្រាំង តើអ្នកយកទឹកមកពីប្រភព	ទឹកភ្លៅង	
3 0	ណាមួយដើម្បីប្រើប្រាស់?		
		ទឹកស្រះ	
	(យកចម្លើយតែមួយប៉ុណ្ណោ៖)	์ รักบีน ,	
		អណ្តូងខូង(អណ្តូងស្នប់) 🗆 អណ្តូងជីក	
		អណ្តូងលូ	
		អណ្ដូងល្ង មានគំរប់	
		ទិញ្ចុំពីអ្នកលក់ទឹក	
		ទិញទឹកដប	
		ទឹកបណ្តាញម៉ាស៊ីន	

90 ท	តើអ្នកធ្វើការសំអាតទឹកដែរឬទេ	តែងតែធ្វើជានិច្ច	
	មុននឹងពិសារ?	ជូនកាលធ្វើ	
		មិនដែលធ្វើសោះ	→ 99
១០ ខ	តើអ្នកធ្វើការសំអាតទឹកសំរាប់ពិសារតាមវិធី	ដាំទឹក	
	ណាដែរ?	ច្រោះទឹក	
		ដាក់ថ្នាំគីមី	
		ច្រើវិធីដទៃទៀត	

ភាពទ្រឹទ្រាស់បន្ទន់

99	តើផ្ទះរបស់អ្នកមានបង្គន់ប្រើប្រាស់ដែរឬទេ?	បាទ/ចាស់	
		ß	→ ୭៤ ñ
១២ ក	តើបង្គន់ដែលអ្នកប្រើប្រាស់នោះ នៅផ្នែកខាង	រណ្ដៅអត់ខ្នោះឬលូ	
	ក្រោមមានទំរង់បែបណា?	រណ្ដៅមានខ្នោះឬលូ	
		មានអាងស្តុក	
	(យកចម្លើយតែមួយ)	មានលូបង្ហូរ	
		ដទៃទៀត	
		មិនជីង	
១២ ខ	តើបង្គន់ដែលអ្នកប្រើប្រាស់មានទំរង់បន្ទះ	បង្គន់អត់ចាន-ជើងជាន់ធ្វើពីឈើ	
	ក្រោមបែបណា?	បង្គន់អត់ចាន-ជើងជាន់ធ្វើពីស៊ីម៉ត់ត៍ 🗌	
	(យកចម្លើយតែមួយ)	បង្គន់ចាក់ទឹក	
		បង្គន់ទំនើបមានចាន	
		ដទៃទៀត	
១២ គ	តើបង្គន់ដែលអ្នកប្រើប្រាស់មានជញ្ជាំង	ចាក់ស៊ីម៉ង់/ឥដ្ឋ	
	បែបណា?	្វ្រីប្រូស៊ីម៉ង់	
		ស័ង្កសីលាយ	
	៤ យកចម្លើយតែមួយ ប្រសិនបើមានជញ្ជាំង	ក្ដារ	
	ផ្សំពីសម្ភារ:ច្រើន សូមជ្រើសរើសមួយដែល	ญี้ที	
	គ្របច្រើនជាងគេ)	ក្ដារដ័រ	
		គ្រឿងអេតចាយ	
		គ្មានជញ្ជាំង	
		ដទៃទៀត	

១២ ឃ	តើបង្គន់ដែលអ្នកប្រើប្រាស់មានដំបូល បែបណា? (យកចម្លើយតែមួយ ប្រសិនបើមានដំបូល ផ្សំពីសម្ភារៈច្រើន សូមជ្រើសរើសមួយដែល គ្របច្រើនជាងគេ)	ចាក់ស៊ីម៉ង់/ឥដ្ឋ
១៣	តើពីផ្ទះនេះទៅបង្គន់មានចំងាយប៉ុន្មាន?	ម៉ែត្រ
9 6 ñ	ជាញឹកញាប់ តើមនុស្សធំនៅក្នុងផ្ទះនេះទៅ បន្ទោរបង់នៅទីណា ពេលដែលពួកគេនៅផ្ទះ?	នៅលើដី
9૯ ટ	ជាញឹកញាប់ តើមនុស្សធំនៅក្នុងផ្ទះនេះ បន្ទោរ បង់នៅទីណា ពេលដែលពួកគេទៅឆ្លាយពីផ្ទះ?	នៅលើដី ប នៅក្នុងទឹក ប នៅក្នុងបង្គន់សាធារណៈ ប ដទៃទៀត (បញ្ជាក់) ប
୭ଓ ମ	ជាញឹកញាប់ តើក្មេងៗនៅក្នុងផ្ទះនេះទៅបន្ទោរ បង់នៅទីណា ពេលដែលពួកគេនៅផ្ទះ?	នៅលើដី
96 W	ជាញឹកញាប់ តើក្មេងៗនៅក្នុងផ្ទះនេះទៅបន្ទោរ បង់នៅទីណា ពេលដែលពួកគេទៅឆ្លាយពីផ្ទះ?	នៅលើដី
១៤ ដ	 សូមសួរ ប្រសិនបើក្មេងៗបន្ទោរបង់ច្រើន កន្លែងជាងមនុស្សធំ) ហេតុអ្វីបានជាក្មេងៗទៅបន្ទោរបង់នៅច្រើន កន្លែងជាងមនុស្សធំ?	

୭៤ ७	(សូមសួរ ប្រសិនបើមានទារកនៅក្នុងផ្ទះ)	នៅលើដី
	តើអ្នកចោលលាមកទារកនេះនៅទីណា?	នៅក្នុងទឹក
		នៅក្នុងបង្គន់ក្នុងផ្ទះ
		នៅក្នុងបង្គន់ផ្ទុំ៖អ្នកជិតខាង
		នៅក្នុងបង្គន់សាធារណៈ
		ដទៃទៀត (បញ្ជាក់)
૭૯ મ્ર	ជាធម្មតា តើសមាជិកក្នុងគ្រសាររបស់អ្នកប្រើ	Ğñ □
	ប្រាស់អ្វីសំរាប់សំអាតគូទ បន្ទាប់ពីបន្ទោរបង់	ស្លឹកឈើ
	លាមករូច?	ក្រដាស់
		ដទៃទៀត (បញ្ជាក់)

នស្សនៈអំពីមខ្ពន់

<u>હ</u> દ્વ	(សំនូរសំរាប់អ្នកមានបង្គន់) បើអ្នកមានបង្គន់ តើវ៉ាផ្តល់ផលប្រយោជន៍ អ្វីខ្លះដល់អ្នក?	លើកកំពស់អនាម័យ/ភាពស្អាត លើកកំពស់សុខភាព
	(សំនូរសំរាប់អ្នកដែលគ្មានបង្គន់) ប្រសិនបើអ្នកមានបង្គន់ តើវ៉ានឹងផ្តល់ផល ប្រយោជន៍អ្វីខ្លះដល់អ្នក? (<i>កុំអានចម្លើយ រងចាំស្តាប់គេឆ្លើយនិងគូស</i>)	
9ð	(សំនូវសំរាប់អ្នកមានបង្គន់) តើការដែលមានបង្គន់ វាមិនផ្តល់ផល ប្រយោជន៍អ្វីខ្លះដល់អ្នក? (សំនូវសំរាប់អ្នកដែលគ្មានបង្គន់) ប្រសិនបើអ្នកមានបង្គន់ តើវានឹងមិនផ្តល់ ផលប្រយោជន៍អ្វីខ្លះដល់អ្នក? (កុំអានចម្លើយ រងចាំស្គាប់គេឆ្លើយនិងគូស)	ធុំខ្លិនស្អុយ

១ ៧	តើអ្នកអាចមានលទ្ទភាពទី	វិញបង្គន់នៅក្នុង	ញូបង្គន់នៅក្នុងតំលៃណាមួយដូចខាងក្រោមនេះ?				
	(គូសក្នុងប្រអប់មួយសំរា	ប់តំលៃនីមួយ ១)	តំលៃនីមួយ ⁹)				
	តំលៃ			ចទិញបង្គន់បាន.	••		
		នៅគ្រប់ ពេល	នៅពេលមានប្រា	តាមរយ:ការ	តាមរយ:ការ	មិនអាច	
			ក់ចំណូលខ្ពស់បំផុ	សន្សំប្រាក់រយ	សន្សំប្រាក់	ទិញបាន	
			តដូចជាក្រោយ	:ពេល២ខែឬ	រយៈពេលច្រើ		
			ពេលច្រូតកាត់	ក៍តិច្ចជាងនេះ	នជាង២ខែ		
	\$900(600.0001)						
	\$៨០(៣២០.០០០រ)						
	\$50(bc0.0001)						
	\$60(980.0001)						
	\$BO(GO.0001)						
១៨	្របង្ហាញដល់អ្នកផ្ដល់	បង្គន់ប្រភេទ /	A		រៀល		
	ចំឡើយនូវរូបភាពបង្គន់ចំ	បង្គន់ប្រភេទ I	បង្គន់ប្រភេទ Bរុល				
	នួន៣]	បង្គន់ប្រភេទ (
	តើតំលៃប៉ុន្មានអ្នកគិត	41 0					
	ថាអាចទិញបង្គន់ទាំង						
	នេះបាន?						

នារនិញមខ្ពន់

	[តើអ្នកផ្តល់ចំឡើយមានបង្គន់ឬទេ?]	មាន	→ 9੬
		មិនមាន	→ ២៥
୭ଝ	តើអ្វីដែលនាំអោយអ្នកឈានទៅរកការ	លើកកំពស់អនាម័យ /ភាពស្អាត	
	សំរេចចិត្តក្នុងការទិញបង្គន់? [សូមកុំអានចំលើយទាំងនេះ គ្រាន់តែគូសត្រង់ចំ លើយ ណា ដែលដូចទៅនឹងចំលើយរបស់ពួកគាត់]	លើកកំពស់សុខភាព	
		មានភាពជាឯកជនជាង	
		ភាពងាយស្រួល/សន្សំពេលវេលា	
		បង្កើនសុវត្ថភាព	
		បង្កើន ប៉ានៈគ្រួសារ / កិត្យានុភាព	
		អត់ដឹង	
		ដទៃទៀត(បញ្ជាក់)	
២o	តើអ្នកបានទិញ /ទទួលបង្គន់នៅឯណា?	អង្គការក្រៅរដ្ឋាភិបាល	
	[សូមកុំអានចំលើយទាំងនេះ គ្រាន់តែគូសត្រង់ចំ លើយ ណា ដែលដូចទៅនឹងចំលើយរបស់ពុកគាត់]	មណ្ឌលសុខភាព	
		ក្រុមប្រឹក្សាឃុំ	
		គណៈកម្មាការអភិវឌ្ឍន៍ភូមិ	

		អ្នកអប់រំសុខភាពប្រចាំភូមិ	
lmo	តើអ្នកបានទិញបង្គន់នៅពេលណា?	ដទៃទៀត(បញ្ជាក់)ឆ្នាំ	
19			
) ១១	តើបង្គន់នោះតំលៃប៉ុន្មាន? [<i>បញ្ចូលជារេវូល ឬក៏ ជាដុល្លា</i>]	វវិល ដុល្លា	
		អត់ដឹង	
២៣	តើមានអ្នកណាខ្លះដែលចូលរួមធ្វើការសំរេចចិត្ត ក្នុងការទិញបង្គន់? [<i>តុសរាល់ចំឡើយដែលបានឆ្លើយ</i>]	មនុស្សប្រុសពេញវ៉យក្នុងគ្រួសារ មនុស្សស្រីពេញវ៉យក្នុងគ្រួសារ កុមារក្នុងគ្រួសារ បងប្អូន ឬ អ្នកជិតខាងក្រៅពីគ្រួសារ	
២៤	តើអ្នកណាជាអ្នករ្យេបចំទិញបង្គន់? (ដូចជា ការទាក់ទងជាមួយអ្នកធ្វើបង្គន់, ការចរចារ អំពីតំលៃ, ការទិញសម្អារ,ការត្រួតពិនិត្យមើល ពីគុណភាព ។ល។) [តូសរាល់ចំឡើយដែលបានឆ្លើយ]	អត់ដឹង មនុស្សប្រុសពេញវ័យក្នុងគ្រួសារ មនុស្សស្រីពេញវ័យក្នុងគ្រួសារ កុមារក្នុងគ្រួសារ បងហ្ជូន ឬ អ្នកជិតខាងក្រៅពីគ្រួសារ អត់ដឹង	
	[ទៅផ្នែកបន្ទាប់]		→ mo
១	តើអ្នកធ្លាប់បានគិតឬក៍ពិភាក្សាអំពីការទិញ បង្គន់ដែឬទេ?	ធ្លាប់	
២៦	ប្រសិនបើអ្នកសំរេចចិត្តទិញបង្គន់, តើអ្នកទៅ ទិញបង្គន់ នៅឯកន្លែងណា? [សូមកុំអានចំលើយទាំងនេះ គ្រាន់តែគូសត្រង់ ចំលើយណាដែលដូចទៅនឹងចំលើយរបស់ពួកគាត់]	អង្គការក្រៅរដ្ឋាភិបាល	

		ទីផ្សារតាមមូលដ្ឋាន					
		អ្នកភូមិផ្សេង១					
		ធ្វើបង្គន់ដោយខ្លួនឯងផ្ទាល់					
		អត់ដឹង					
		ដទៃទៀត(បញ្ជាក់)					
២៧	ប្រសិនបើអ្នកសំរេចចិត្តទិញបង្គន់, តើអ្នកណា	មនុស្សប្រុសពេញវ័យក្នុងគ្រួសារ					
	ខ្លះគូតែចូលរួមក្នុងការសំរេចចិត្តនេះ?	មនុស្សស្រីពេញវ៉យក្នុងគ្រួសារ□					
	[គូសរាល់ចំឡើយដែលបានឆ្លើយ]	កុមារក្នុងគ្រួសារ					
		្រុំ ។ បងប្អូន ឬ អ្នកជិតខាងក្រៅពីគ្រួសារ□					
		អត់ដឹង					
២៨	ប្រសិនបើអ្នកសំរេចចិត្តទិញបង្គន់, តើអ្នកណា	មនុស្សប្រុសពេញវ័យក្នុងគ្រួសារ					
	ជាអ្នករ្យេបចំទិញបង្គន់?(ដូចជាការទាក់ទងជា	មនុស្សស្រីពេញវ័យក្នុងគ្រួសារ					
	មួយអ្នកធ្វើបង្គន់, ការចរចារ អំពីតំលៃ,	កុមារក្នុងគ្រួសារ					
	ការទិញសម្អារ,ការត្រូតពិនិត្យមើល ពីគុណភាព ។ល។)	្រុំ ។ បងប្អូន ឬ អ្នកជិតខាងក្រៅពីគ្រួសារ \square					
		អត់ជីង					
[වස්	[<i>តូសរាល់ចំឡើយដែលបានឆ្លើយ</i>] ហេតុអ្វីបានជាអ្នកអត់ទិញ ឬអត់មានបង្គន់	ថ្លៃពេក,អត់មានលុយគ្រប់គ្រាន់ សំរាប់សង់□					
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		บันกา?					
		មានបញ្ហាផ្សេងៗឡេតដែលសំខាន់ហើយត្រូវតិ					
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				រអភិវឌ្ឍន៍ភូមិ.			
			អ្នកអប់រំសុខ	ភាពប្រចាំភូមិ			
			គ្រូពេទ្យ, ឱ្	ឋថការី. ឱសថត្	ຸກຣ		
			សាលារ្យេំន,	ត្រូបង្រៀន			
			វត្ត, ចៅអធិ	ការ ឬ ព្រះសង្ឈ			
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		ល្អចំផុត	មិនសូវល្អ	មិនល្អ			
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	អ្នកភូមិផ្សេង១						
	អង្គការក្រៅរដ្ឋាភិបាល						
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			ច្រើនជាង១អា	ទិត្យម្ដង		
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អំពីពិ	สาเสาด					
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៣៦	តើនៅក្នុងគ្រួសាររបស់អ្នកមានមនុស្សពិការ	មាន	→ ៣៧
	19?	្នុំ	→ បញ្ចាប់ការ
			សូរសំនួរ
៣៧	តើនៅក្នុងលេខរ្យេងណាមួយ នៃសមាជិក		
	គ្រសាររបស់អ្នក?	លេខរ្យេំងក្នុងសមាជិកគ្រសារ	
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	គ្រួសារ នៅក្នុងទំព័រទី១ នៃបញ្ជីរសំនួរ]		
៣៨	រ្យេបរាប់អំពីលក្ខណៈនៃពិការភាព		

៣៩	តើអ្នកពិការនេះបន្ទោបង់យ៉ាងដូចម្ដេច?	មានការជួយ	
		ផ្ទានការជួយ□	
6 0	តើគាត់មានប្រើប្រាស់សំភារះអ្វី ដើម្បីជួយ សំរូលដល់ការបន្ទោបង់របស់គាត់ដែរឬទេ?	បាទ/ចាស់	→៤១ → បញ្ចប់ការ សូរសំនូរ
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សាសណាសម្ព័នេះ

ANNEX D: SAMPLE LATRINE DIAGRAMS

Diagrams used in Household-level Questionnaire (Q18) and Focus Group Discussions

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ANNEX E: FOCUS GROUP DISCUSSION GUIDELINE (ENGLISH)

Sanitation Demand Survey Focus Group Discussion Guideline

Introduction of moderator; purpose; discussion is non-political and confidential; participants self-introductions (name, age, marital status, number of children, village, etc.).

Socio-Economic

- What is your main occupation? What is your secondary occupation? How many people are there in your family? What is your main source of income in your household? How many people can make money to support your family?
- In what month(s) do you have the highest income? What items did you spend money to buy recently? Do you intend to buy or do you plan to buy anything in the near future?

Health Care Awareness

- Do you understand the word: Health? What does HEALTH mean to you?
- Do you understand the word: Sanitation or Hygiene? What do these words mean to you? Do you know any that relate to our human health?
- What should you do to maintain Good health?

Water Source

- What is your main source of domestic water? Domestic water includes water for drinking, washing and other household uses. Wet season and Dry season
- Do you treat your drinking water? What method do you use to treat your drinking water?

Latrine ownership and use

- Do you own a latrine? What kind latrine? (below ground, slab, shelter)
- Why don't you have latrine in your household? Do you plan to buy one soon?
- Where do adult members of your household usually go to defecate? When at home? When away from home?
- Where do children in this household usually go to defecate? When at home? When away from home?

Latrine Perceptions

- What type of latrine do you wish to have? What kind of latrine do you imagine to have? (below-ground, slab, walls, roofs, below-ground structure)
- How much do you think your ideal latrine (Dream-latrine) would cost?
- What are the advantages of owning your own latrine? What are the disadvantages of owning your own latrine?
- For people who does not own a latrine, what do you think would be the disadvantages of owning your own latrine?
- Can you afford to buy a latrine at the following prices? \$100, \$50, \$25. Why or whay not?
- Show image of Latrine to respondents to select the most preferred one, then, ask few
 questions.

Latrine Purchase

- What made you decide to purchase a latrine?
- Where did you purchase/receive your latrine? When did you purchase your latrine? How much did you pay for your latrine?
- Who participated in the decision to purchase your latrine? Who arranged the latrine purchase?

Ask any respondents who have not yet owned a latrine

- Have you ever thought about or discussed purchasing a latrine?
- If you decided to purchase a latrine, where would you go to purchase it?
- If you decided to purchase a latrine, who participated in the decision?
- Why don't you own a latrine?

Health Education

- Have you ever got any education on health and sanitation previously? What have you got?
 How have you got those educations?
- In your opinion what source of information on Health and Sanitation is most reliable? (Person who train, institution which provide training?)

Media

- Which radios do you listen most? At what time? Which program?
- Which television do you watch most often? At what time? Which program? Which newspaper or magazine do they read?

Final Question

- Are there any family members having diarrhea or other diseases in the last two week?
- Do you know what the causes to those diseases are? How do you cure those diseases? Where do you go?

Any suggestions for our organization?

ANNEX F: SUMMARY TABLES FROM FOCUS GROUP DISCUSSIONS

1. Consumer profile

	Number of respondents	Gender	Age groups	Household Size	Occupations	Latrine ownership	Income Earners in HH	Period of high HH income	Period of high HH expenditure	Spare money
Rural	20	15 men, 5 women	35-55 (SR & Kdl)	avg: 4-7	Village Chiefs (2)	5 with, 15 without	2 y earners (6 HHs)	DS (Dec to Apr) after selling rice (17)	DS (Feb to Apr) weddings & ceremonies (20)	No
			23-50 (SiemR)	min: 3	Policeman (1)		2-3 y earners (12 HHs)	WS fish/veg (2)		small savings for children's study (1)
				max: 9	Rice farmers (14)		4 y earners (2 HHs)	all year - salary (1)		
					Teachers (2)					
					Laborer (1)					
Urban	24	9 men, 15 women	25-65 (SR)	avg: 5-7	Farmers	16 with, 8 without	1 y earner (3 HHs)	DS (Dec to Apr) after sell rice (12)	DS weddings and ceremonies (22)	Not asked of urban groups
			18-45 (SiemR)	min: 3	Minor Vendors		2 y earners (18 HHs)	all year - salary/constant y (8)	subsistence - same amount each month (2)	
			25-55 (PP)	max: 10+	Village Chiefs		3-4 y earners (3 HHs)	WS fish (1)		
					Laborer					
					Civil Servant					
					Fisherman					
					Teacher					
	Notoge									

Notes:

^{1.} The PP Urban FG discussed ability to save. It was communicated that all respondents were very poor and existed from hand to mouth. This is the case for most people in their village

2. Water Supply

	Sources of domestic water	Sources of drinking water	How often drink boiled water	Other perceptions regarding water usage
Rural	water from drilled wells	raw water from drilled wells	always (all 8 Kandal)	Filtered water also safe (1 Village Chief)
	dug wells	boiled water	some of the time	do not use rain water to drink as afraid of acid rain (2)
	own pond (1)	raw water from pond river	not regularly	Children often drink raw water as they believe it has a better taste (Kandal)
		filter (1)	never (5 farmers)	
		raw water that has been frozen (1)		
Urban	water from drilled wells	one village store rain water as boiled water from drilled well turns purple (SR)	sometimes	
	State supplies (PP)	boil water every day from state supplies (PP only)	always (PP only)	
		bottled water for guests (PP only)		

3. Current Sanitation Practices

	Understanding of words "Health" and "Sanitation"	What factors relate to health	Frequency of sanitary practices	Do you have a latrine	Where go to defecate	Satisfied with current latrine
Rural	Health is strong body no sickness	drink safe water	sometimes, because too busy and no money	no (10)	latrine	no (2)
	Sanitation - eat and drink safe, sleep in clean place	don't smoke cigarettes		yes (5)	rice field	yes (1)
	understand words, but difficult to explain	eat clean vegetables (washed, boiled and without pesticides)		temporary small pit (5)	when in town, pagoda or school can use latrine	
		sleep under mosquito net				
		improve house environment				
Urban	Health is body and no sickness (many respondents agree)	boil water	regularly (21)	yes (15)	latrine	no (12)
	Health is prevention of disease	eat clean vegetables and fruit	irregularly (3)	small pit or rice paddy (8)	rice field	yes (5)
	Sanitation - latrine use, eat and drink safely, sleep in clean place, clean house	wash hands and body regularly		dry pit (1)	neighbors latrine	Many who were dissatisfied said that their latrine was only temporary, or unfinished. They don't have money to buy better ones.
	"If we are sanitary we have good health, so health and sanitation have correlation"	clean house				
		use latrine				

Notes:

- 1. Siem Reap rural FG gave details of latrines owned. (1) given by NGO, HH spent 20,000 Rs to build. (2) bought from market costing 1,000,000 Rs, bought for convenience of family, especially elderly parents.
- 2. Kandal rural FG had no respondents who owned latrines. All go to rice fields to defecate. It was acknowledged that this was more difficult in rainy season as the rice fields are flooded. Respondents said they were shy about using rice fields and felt embarrassed when visitors came. However, most villagers in their village are in this situation.

4. Latrine Perceptions (Rural 1)

	Advantages of latrine	Ideal Latrine	Cost of Ideal Latrine	Ever saved to buy dream latrine?	Ability to buy subsidized ideal latrine	If latrines are subsidised will your village use? (eg of Kratie given)
Rural	sanitation	(majority) - concrete lined pits, ceramic pan, slab and seal, concrete walls, tiled/fibro roof, water basin inside.	\$200 USD (majority), less than \$200 USD (1), \$300 USD (1)	no, not enough money to save. Live hand to mouth.	latrine @ \$100	Yes, their village would use (maj)
	convenience	(some) concrete pit, offset tank, concrete pan and slab, brick wall and roof.	\$150 to \$250	try, but not yet enough (4)	yes, but not now need around 1 year for saving (all Kandal, most Siem R, some in other groups)	Need to be on private land, eg of 1997 PADEK project where latrines were communal and villagers would not use b/c of concerns about transmitting disease. (1 SR)
	good for guests	ceramic pan, concrete slab, concrete wall, zinc roof, offset tank and water basin inside (2)			yes, immediately (4)	Need to choose participants who have money and will to have latrine, eg of HAGAR project (see note 2)
	produce gas for cooking where NGO train about this process (1)	concrete pan and slab, roof and wall can be thatched (1)			no, no money (2)	
					latrine @ \$50	
					yes, most.	
					yes, but still need 3-4 months to save (Kandal)	
					Should choose people who definitely want to build	
					Some suspicious about quality	

4. Latrine Perceptions (Rural 2)

	Why no latrine?	How long without a latrine	Would you build temporary latrine	How long had latrine (latrine owners)	Why built current latrine (latrine owners)	Where purchase current latrine (latrine owners)	Feelings about visiting house with no latrine
Rural	not enough money	since 1979	many have temporary pit during WS as more difficult to find places to defecate in fields.		,	bought materials from the market and build by self	inconvenient as must go to rice fields and may not know good place (many)
	need lots of time and hard work to save and build	since left parents house	Do not want temporary latrine like Image-A as not good and attractive, prefer to wait for better (Image-C) (many)			bought materials from the market and rented latrine maker	will not stay long and will return home quickly (many)
			"If build Image-A latrine it seems useless as it can be used for short time only. It will be removed immediately when have enough money to build better latrine". (1)				eat less to avoid problem

Notes:

- 1. Svay Rieng rural FG had two village chiefs in discussion who said: (1) A small amount of his village could buy "ideal latrine" of \$200 if subsidized to \$100. Around 20% could pay, but they would not pay immediately as would need time to save. (2) His villagers could not pay for this, even if subsidized to \$100.
- 2. Svay Rieng rural FG Village Chief had experience in past where HAGAR donated one concrete pan and five concrete lined pits. The villagers had to transport materials from the retailer and build themselves. They needed to spend between \$70 to \$80 to construct this latrine. Villagers did not build these latrines as they did not have the money. "As a bad habit in Cambodian rural areas many villagers want to get everything free from all NGO".

4. Latrine Perceptions (Urban 1)

	Advantages of latrine	Ideal Latrine	Cost of Ideal Latrine	Ability to buy subsidized ideal latrine	If latrines are subsidised will your village use? (eg of Kratie given)
Urban	convenience	(majority) - concrete lined pits, offset tank, slab and seal, brick walls, water basin and shower inside, tiled roof.	\$500 USD (SR, 5 SiemR), \$600-\$700 (3 SiemR)	latrine @ \$100USD	Need to give materials to those who can afford and want to build the latrine, need to educate villagers in advance (1 SR)
	privacy	concrete lined pit connected to sewage pipe, uses water, ceramic floor, brick walls and tiled roof (all PP)	\$150 to \$200 USD (maj):1 respondent said this is not enough, as his current latrine cost \$250, (2) responded that they only want small latrine. \$400 (2).	yes, but not now, from 1 to 6 months, for some 1 year (maj)	
	save time, as do not need to walk to rice field.	concrete rings, brick floor, closed walls (2)	\$150 USD	yes, immediately (3)	
	sanitation for family (reduce insect born disease, reduce cholera and diarrhea infection)	inside house (1 PP)		no, no money (2)	
	good for guests, honor when guests come			latrine @ \$25-\$50 USD	
	smell does not bother neighbors			yes, within one week but need to see before purchase (majority)	
	easy for bathing			no, prefer to wait for better latrine. Need good latrine as houses flood in WS (2)	
	"latrine is very important to daily life - it is better to have latrine than gold" (1 SiemR)			yes, but not now (1)	
				no, can not afford \$50, but could afford \$25 and would use own labor	

4. Latrine Perceptions (Urban 2)

	Why no latrine?	How long without a latrine	Why built current latrine (latrine owners)	Where purchase current latrine (latrine owners)	Feelings about visiting house with no latrine
Urban	not enough money or ability, but really want latrine	since 1979	Live in town so no open space or rice fields	bought materials from the market and build by self (3)	will not stay long and return home quickly (those with latrines)
	Owns much land, can dig a small pit on land for defecating and then becomes fertilizer (1 Village Chief)		Shy to defecate in rice field	bought materials and rented latrine maker from market \$75 usd to construct (1)	stay at house as plan, it is normal not to have latrine (those without latrines)
			difficult to use neighbors latrine	bought materials from market and rent latrine maker (6 PP)	feel inconvenient, and only stay one day as feel shy about defecating in rice field now that have latrine in own house (1)

5. Latrine Purchase Decision

	Who decides to buy latrine	Who bargains at market	Who implements project	Consult neighbors about purchase	Follow neighbors advice	Pay more if materials more expensive at store
Rural	Discuss with family members	Wives bargain	Husband and children	Yes, consult about how to build and the cost	Depend on price - will go to cheapest place.	yes, if only little money and higher quality (5)
	otherwise may have conflict with family	Husbands assess quality of product	unless big job, then wife also	consult NGO (1 SiemR)	Will buy each piece separately for cheapest price (1)	no, not enough money (3)
		(some) husband goes to market by self	wife, after agreement from husband (1 Sreap)			
Urban	discuss with family members before decide to buy	husband, no need for wife to go as she has other work. Waste time to go together (PP)	husband	yes, ask about how to build and where to buy.	Sometimes follow neighbor, sometimes not. Will go to any shop near house.	No, cannot. Do not wish to borrow and do not have the money. (PP)
	this way avoid disputes among family members				important to consult those who already have latrine and have experience in this. (SiemR)	Cannot, husband would be in trouble with wife if he did this (1PP)
					All latrine makers provide the same service (PP)	

Notes:

^{1.} SR urban did not follow discussion Qs for this topic. Although did discuss for those who do not have a latrine whether they would like to build themselves (1) or hire someone to construct (2).

6. Information Channels (Rural)

	How do you get health education	Who is best to educate about latrine / health	What performers can be used on TV/Radio	Do you listen to radio	Do you watch TV, What channels	Do you read newspaper or magazines.
Rural	television - drink clean water, prevent tuberculosis, wash hands.	Village chiefs, elderly, pagoda leaders	Real people, audiences will not believe comedians and TV stars	Yes (majority) during noon and late evening.	Yes (majority)	No, cannot afford (maj)
	radio	Physicians who do direct training in the village	Health care or physicians as audiences will believe them.		CTN (maj)	Read Reaksmay Kampuchea but not often (1 SiemR)
	local authorities - health workers or physicians	Health workers and civil servants.	Comedians, (1 respondent said these comedians must be in physicians dress so that people believe them)		TVK, TV5, TV9, TV3, Bayon TV	
	provincial departments of public health	Health workers and civil servants need to follow up regularly otherwise villagers will not continue (SR)	message must be clear and simple, otherwise viewers watch for fun and not understand message			
	NGOs: CARE, PADEK	Build samples and give to responsible village members so that they can recommend and discuss experiences with others. (SR)	children as they are most vulnerable to disease (1 SR)			
	frequent info from district health officers (every 2-3 months). Particularly about polio drip for children (Kandal)	Should not use latrine makers or sellers as people will not trust their motives (Sriep)	Not a good idea to use television as many people do not have access to television and have low education and so need to listen to trainers directly (Sriep)			

6. Information Channels (Urban)

	How do you get health education	Who is best to educate about latrine / health	What performers can be used on TV/Radio	Do you listen to radio	Do you watch TV, What channels	Do you read newspaper or magazines.
Urban	television - sanitary health practices (majority)	Television	real people (all groups except PP)	yes, regularly (majority)	Yes (majority)	No, too busy and cannot afford (majority)
	NGOs: Red Cross	NGOs should educate directly	do not use film stars or comedians because audience will not trust them (SR)	never (4 SR) prefer to get information from television	CTN, especially noon and evening. (majority)	Yes, occasionally (2 Village Chiefs)
	radio	Physicians	Audiences will believe when ordinary people perform because it seems to show a real situation. (SiemR)		TV5, Bayon TV, TV9 and TVK	"useless to advertise in magazine as there are very few people who read magazines in SiemR".
	health centres	Village chiefs and commune councilors	Current popular comedians, like Mr Koy or Mr Krem, can attract many people to watch. Need to be comedians that people trust, can focus on health and education in a fun way (PP).			
	commune councils	Village chiefs not appropriate as should focus on political issues only (SiemR)	People will not believe where they think it is for commercial purposes			
	No govt health workers (all groups)					

Notes:

^{1.} Siem R rural had additional discussion about where information is sourced. Most respondents said they receive info from word of mouth. Sometimes they believe this other times they do not. They do not believe commercial information on TV or from sellers.

ANNEX G: SURVEY VILLAGES

	District (Srok / Khand)	Commune (Khum / Sangkat)	Village (Phum)	Total Households	Households Interviewed	Survey Date	Survey Team
	RAL Villages						
	dal Province	Т	T	1			
1	Kanda Stoeung	Kandaok	Taok Ma	123	20	13-Mar-06	1
2	Kanda Stoeung	Preaek Kampis	Srei Snam	229	18	13-Mar-06	2
3	Kanda Stoeung Khsach Kandal	Spean Thma	Svay Mean Leak	49	18	13-Mar-06	3
5	Lvea Eam	Preaek Ampil Boeng Krum	Preaek Doun Haem Boeng Krum Kraom	292 420	21	14-Mar-06 14-Mar-06	2
6	Pon Nhealoeur	Tom nupthom	Baek Thlang	65	18	14-Mar-06	3
7	Saang	Khpob	Khpob Leu	184	18	15-Mar-06	1
8	Saang	Krang Yov	Andoung	210	21	15-Mar-06	2
9	Saang	Krang Yov	Ping Pong	114	21	15-Mar-06	3
	n Reap Province	Trung 107	I mg I ong	111	21	13 14141 00	
10	Soutr Nikom	Dan Run	Santey	173	19	20-Mar-06	1
11	Chi Kraeng	Kampong Kdei	Kampong Kdei Muoy	98	18	20-Mar-06	2
12	Chi Kraeng	Ruessei Lok	Samraong Kanhchaoch	245	19	20-Mar-06	3
13	Puok	Sasar Sdam	Kouk Pnov	103	18	21-Mar-06	1
14	Puok	Doun Kaev	Doun Kaev	206	21	21-Mar-06	2
15	Puok	Yeang	Kanhchan Kuy	169	18	21-Mar-06	3
16	Angkor Chum	Doun Peaeng	Rumdoul Thmey	123	22	22-Mar-06	2
17	Svay Leu	Boeng Mealea	Boeng Mealea	290	19	22-Mar-06	3
18	Siem Reab	Nokor Thum	Areaks Svay	99	21	22-Mar-06	1
Svay	y Rieng Province						
19	Chantrea	Me Sa thngak	Dei Kraham	205	21	26-Mar-06	1
20	Kampong Rou	Svay Toea	Teahean Kraom	145	20	26-Mar-06	2
21	Kampong Rou	Svay Ta Yean	Prey Praeus	191	19	26-Mar-06	3
22	Romeas Haek	Chantrei	Prey Kabbas	121	21	27-Mar-06	1
23	Romeas Haek	Chantrei	Prey Totueng	120	20	27-Mar-06	2
24	Romeas Haek	Kampong Trach	Chong Ou	160	20	27-Mar-06	3
25	Svay Chrum	Kruos	Chambak	216	20	28-Mar-06	1
26	Svay Chrum	Svay Thum	Dak Po	357	21	28-Mar-06	2
27	Rumduol	Chak	Chak	381	19	28-Mar-06	3
***	D 4 NY WY99		Ri	ural Total	532		
	BAN Villages						
	om Penh	T	T-, -,-,				
1	Mean Chey	Stoeung Meanchhey	Phum Prek Toal	870	30	16-Mar-06	1
2	Mean Chey	Chak Ang Rekrom	Phum Tool Ro Ka	1519	30	16-Mar-06	2
3	Mean Chey	Chak Ang Rekrom	Phum Prek Talong	1243	30	17-Mar-06	2
	Russesy Keo n Reap Town	Toeuk Thla	Phum Sleng Roleung	955	30	17-Mar-06	3
		Sla Kram	Dak Pou	517	30	22 Mar 06	1
5 6	Siem Reab Siem Reab	Svay Dangkum	Kruos	517	31	23-Mar-06 23-Mar-06	2
7	Siem Reab	Siem Reab	Aranh	523	30	23-Mar-06 24-Mar-06	2
8	Puok	Puok	Puok Chas	222	29	24-Mar-06	3
-	y Rieng Town	1 uon	1 don Chao		27	211111-00	
9	Svay Rieng	Svay Rieng	Me Pheung	503	30	29-Mar-06	1
10	Svay Rieng	Svay Rieng	Kien Sang	314	30	29-Mar-06	2
11	Svay Rieng	Koy Trabaek	Koy Trabaek	334	36	30-Mar-06	2
12	Svay Rieng	Pou Ta Hao La		102	34	30-Mar-06	3
				ban Total	370		
SPE	CCIAL CASE Villages						
	npong Speu Province						
1	Phnom Srouch	Mohasang	Sleang	97	18	16-Mar-06	1
Sien	n Reap Province	-	•		l l		
2	Banteay Srey	Rom Check	Salakrovan	203	19	23-Mar-06	1
2	Danied Siej						

ANNEX H: SURVEY TEAM MEMBERS

	Name	Gender	Position	Team #
1	Kim Veasna	М	Survey Coordinator	
2	Chay Sotheary	F	Lead Surveyor	1
3	Uch Bunnak	М	Surveyor	1
4	Cheam Pe In	М	Surveyor	1
5	Pen Samoeun	М	Lead Surveyor	2
6	Lao Vannaroth	F	Surveyor	2
7	Chhun Chan Thoeurn	М	Surveyor	2
8	En Chanyarith	М	Lead Surveyor	3
9	Teav Chandara	М	Surveyor	3
10	Gnoung Sokhay	F	Surveyor	3
11	Lem Varidh	M	Focus Group Facilitator	
12	Michael Roberts	М	Technical Advisor	

ANNEX I: FOCUS GROUP DISCUSSION PARTICIPANTS

Туре	Location	Total Participants	Male	Female	Latrine	No Latrine
Rural	Kandal	4	3	1	0	4
Rural	Siem Reap	8	5	3	2	6
Rural	Svay Rieng	8	7	1	3	5
Urban	Phnom Penh	8	4	4	7	1
Urban	Siem Reap	8	2	6	5	3
Urban	Svay Rieng	8	5	3	4	4
Totals		44	26	18	21	23

ANNEX J: DATA TABLE FOR VILLAGE-LEVEL QUESTIONNAIRE

Village Level Questionnaire

	Tinago Estor Questionnano								Q4a (Q4b			Q5c	Q6									
Location	า				Population	on	Latrines		Interview	vs	Dist. to r	narket (ł	κm)	NGC	expo	osure							
Туре	Province	District/ Khand	Commune/ Sangkat	Village	Households	People	Total latrines	% with Latrines	Latrine owners	Non owners	Commune	District	Province	# of NGOs	# of Years Drinking	water Sanitation	Health	Education	Agriculture	Comm. Org.	Human rights	Disaster relief	Microcredit
Rural	Kandal	Khsach Kandal	Preak Ampil	Prek Dounhem	292	1541	32	11%	6	15	0.5	8	13	3	6	•	•	•					•
Rural	Kandal	Lvea Em	Boeung Krum	Boeung Krum Kroum	420	2125	20	5%	6	15	1	7	30	1	4	•	•	•	•				
Rural	Kandal	Pon Nhealoeu	Tom Nupthom	Baek Thlang	65	363	10	15%	4	14	6	16	50	1	1	•	•	•					
Rural	Kandal	Saang	Khpob Leu	Khpob Leu	184	939	60	33%	4	14	0.5	20	30	1	4	•							
Rural	Kandal	Saang	Krang Yov	Ping Pong	114	600	8	7%	4	17	1.5	7	30	1	10				•				
Rural	Kandal	Saang	Krang Yov	Andoung	210	990	9	4%	4	17	2	10	30	0	0								
Rural	Kandal	Kandal Stoeung	Kandouk	Touk Ma	123	623	113	92%	5	15	0	5	16	2	4	• •		•	•				
Rural	Kandal	Kandal Stoeung	Spean Thmor	Svay Meanleak	49	254	7	14%	4	14	0.5	7	10	0	0								
Rural	Kandal	Kandal Stoeung	Praek Kampis	Srei Snam	229	1055	56	24%	3	15	1	8	8	0	0								
Rural	Siem Reap	Angkor Chum	Doun Paeng	Rumduol Thmey	123	630	0	0%	0	22	4	10	60	3	2	•		•	•				
Rural	Siem Reap	Chi Kraeng	Russei Lok	Samroung Kanhcaoch	245	1348	5	2%	4	15	4	20	40	0	0								
Rural	Siem Reap	Chi Kraeng	Kampong Kdei	Kpg. Kdei 1	98	565	80	82%	10	8	0.7	0.7	62	0	0								
Rural	Siem Reap	Pouk	Sasar Sdam	Kouk Pnov	103	611	3	3%	3	15	0.4	16	31	1	1	•							
Rural	Siem Reap	Pouk	Yeang	Kanhchan Kuy	169	870	0	0%	0	18	3	17	31	0	0								
Rural	Siem Reap	Pouk	Doun Keo	Doun Keo	206	1097	1	0%	1	20	3	7	22	2	4								•

					Q1	Q2c	Q3		Q4a (Q4b	Q5a (Q5b (Q5c	Q6										
Location					Populati		Latrines		Interview		Dist. to n			NGC	exp	oosu	re							
Туре	Province	District/ Khand	Commune/ Sangkat	Village	. Households	People	Total latrines	% with Latrines	Latrine owners	Non owners	Commune	District	Province	# of NGOs	# of Years	Drinking water	Sanitation	Health	Education	Agriculture	Comm. Org.	Human rights	Disaster relief	Microcredit
Rural	Siem Reap	Siem Reap	Norkor Thom	Areak Svay	99	479	2	2%	0	21	6	10	10	3	11	•				•				•
Rural	Siem Reap	Soutr Nikom	Dan Run	Santey	173	931	89	51%	5	14	0	6	33	1	2		•	•		•				
Rural	Siem Reap	Svay Leu	Boeung Mealea	Boeung Mealea	290	1365	4	1%	3	16	0	9	60	1	5		•	•	•	•	•			
Rural	Svay Rieng	Chantrea	Me Sathngak	Dei Krahorm	205	1023	1	0%	1	20	3	2	32	2	10	•				•				
Rural	Svay Rieng	Kampong Ro	Svay Toeu	Teahean Kraom	145	732	15	10%	5	15	0	2.5	10	3	13	•				•				
Rural	Svay Rieng	Kampong Ro	Svay Tayean	Prey Praeus	191	826	15	8%	5	14	0	9	30	2	5	•		•		•				
Rural	Svay Rieng	Romeas Haek	Chantrei	Prey Kabas	121	576	20	17%	3	18	1.7	20	24	1	9		•	•	•	•				•
Rural	Svay Rieng	Romeas Haek	Chantrei	Prey Totueng	120	504	4	3%	3	17	7	25	30	1	1			•	•	•				
Rural	Svay Rieng	Romeas Haek	Kampong Trach	Chong Ou	160	958	0	0%	0	20	3	3	39	1	1					•				
Rural	Svay Rieng	Rumduol	Chak	Chak	381	1849	104	27%	5	14	0.5	1	10	1	7			•		•				
Rural	Svay Rieng	Svay Chrum	Kruos	Chambak	216	944	3	1%	2	18	10	15	15	1	2		•	•	•	•	•			
Rural	Svay Rieng	Svay Chrum	Svay Thom	Dak Po	357	1568	4	1%	4	17	4	7	18	1	8					•				
Rural Ar	reas Summary	У		Average Total	188 5088	939 25366	25 665	13% -	3.5 94	16.2 438	2.3	9.9 -	29 -	1 -	4.1 -	- 7	- 9	- 10	- 9	- 16	2	- 0	- 0	- 4
Urban	Phnom Penh	•	Chak Angrekrom	Too Roka	1519	7758	1501	99%	26	4	2	5	12	1	3			•						
Urban	Phnom Penh	Mean Chey	Chak Angrekrom	Prek Talong	1243	6928	1243	100%	21	9	2.5	6.5	0.9	0	0									

					Q1	Q2c	Q3		Q4a (Q4b	Q5a (Q5b (Q5 c	Q6										
Location					Populati	on	Latrines		Interview	/S	Dist. to n	narket (k	m)	NGC	exp	osure								
Туре	Province	District/ Khand	Commune/ Sangkat	Village	Households	People	Total latrines	% with Latrines	Latrine owners	Non owners	Commune	District	Province		# of Years	water	Same	Health	Education	Agriculture	Comm. Org.	Human rights	Disaster relief	Microcredit
Urban	Phnom Penh	Mean Chhey	Stoeung Mean Chhey	Prek Teall	870	4899	651	75%	20	10	0.8	3	2	2	9			•	•			•		
Urban	Phnom Penh	Russey Keo	Toeuk Thla	Sleng Roleung	955	5236	955	100%	30	0	2	15	5	0	0									
Urban	Siem Reap	Pouk	Pouk	Pouk Chas	222	1150	140	63%	14	15	0	1.5	16	1	7					•				
Urban	Siem Reap	Siem Reap	Sla Kram	Dak Pou	517	3234	406	79%	22	8	0.1	0.1	0.1	0	0									
Urban	Siem Reap	Siem Reap	Svay Dangkum	Kruos	513	2882	436	85%	16	15	3	3	4	0	0									
Urban	Siem Reap	Siem Reap	Siem Reap	Aranh	523	3500	30	6%	6	24	3	10	10	1	1	•								
Urban	Svay Rieng	Svay Rieng	Svay Rieng	Me Phleung	503	2526	262	52%	19	11	0	0	0	4	10	•	•	•	•				•	•
Urban	Svay Rieng	Svay Rieng	Pou Tahor	Lor	102	975	86	84%	17	17	0.5	1	2	1	6			•			•			
Urban	Svay Rieng	Svay Rieng	Koy Trabaek	Koy Trabaek	334	1407	86	26%	15	21	0.3	1.3	1.3	1	1	•								
Urban	Svay Rieng	Svay Rieng	Svay Rieng	Kien Sang	314	1646	185	59%	14	16	1	1	1	2	7			•				•		•
Urban A	reas Summar	у		Average	635	3512	498	79%	18.3	12.5		4.0	4.5	1	3.7		-	-	-	-	-	-	_	_
				Total	7615	42141	5981	-	220	150	-	-	-	-	-	2	1	5	2	1	1	2	1_	2
Special	Kampong Speu	Phnom Sruoch	Phnom Sruoch	Slaeng	97	452	73	75%	16	2	0	0	20	1	1	•	•	•	•					
Special	Siem Reap	Banteay Srey	Rumchek	Sala Kravann	203	1177	11	5%	5	14	1	7	30	1	8	•	•	•	•	•				
Special (Case Villages	Summary		Average	150	815	42	28%	10.5	8.0		3.5	25	1	4.5	-	-	-	-	-	-	-	-	-
				Total	300	1629	84	-	21	16	-	-	-	-	-	2 2	2	2	2	1	0	0	0	0

ANNEX K: DATA TABLE FOR HOUSEHOLD-LEVEL QUESTIONNAIRE

RURAL AREAS REPORT

Q0a Total number of villages Q17	26 24 15 417 42.5 60% 5.3 25.1 21% 4.5 8.2% 7.2% 30% 90% 1.2 99% 64%
Q0bTotal number of communes2622Q0cTotal number of districts1514Q0dTotal number of questionnaires51295Q0eAverage age of respondent (person who answered the questionnaire)44.050.6Q0fFemale respondents (person who answered the questionnaire)59%58%Q1Average household size5.35.6Q1bAverage age of all household members26.130.0Q1cFemale headed households (percentage out of all households)20%19%Q1dAverage years of education for those over 18 years4.96.1Q1eHave had at least one case of diarrhea in the past 2 weeks (percentage out of all people in respondent households)7.9%6.7%Q1bUnder-5 that have had one or more cases of diarrhea in the past 2 weeks (percentage out of all under-5s)3.7%Q2aHouseholds that own agricultural land (percentage out of all respondents)90%88%Q2bAverage land size for respondents that own agricultural land (ha)1.31.7Q3aHouseholds that own their residential property (percentage out of all respondents)99%100%Q3bHouseholds that have residential land title (percentage out of all respondents)64%68%Never55%52%	24 15 417 42.5 60% 5.3 25.1 21% 4.5 8.2% 7.2% 30% 90% 1.2
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that own their residential land) Q3c Residential land flooding (percentage out of all respondents) Never 55% 52%	64%
Never 55% 52%	
Sometimes 33% 40%	55%
3570 4 070	31%
Every year 12% 8%	13%
Q4 Roof construction material (percentage out of all respondents)	
Concrete 0% 1%	0%
Fibrous cement 5% 6%	5%
Galvanized steel 47% 35%	50%
Tiles 30% 53%	25%
Thatch 17% 5%	20%
Plastic sheet 0% 0%	0%
Salvaged material 0% 0%	0%
Other 0% 0%	0%
Q5 Asset ownership (percentage out of all respondents)	
Plough 61% 56%	62%
Harrow/rake 58% 56%	59%
Ox-cart 33% 39%	32%
Semi tractor ko yun 2% 6%	1%
Tractor 0% 0%	0%
Manual water pump 26% 40%	23%
Engine-powered water pump 14% 27%	11%
Rice mill 4% 4%	3%
Threshing machine 1% 1%	1%
Cattle/oxen/buffalo 67% 66%	67%
Pigs 51% 46%	52%
Car 1% 3%	0%
Motorcycle 40% 66%	34%
Bicycle 83% 89%	81%
Row boat 4% 5%	4%

No	Question	All	Latrine o	wnership
		Rural	Yes	No
	Moto boat	0%	0%	0%
	Telephone/cell phone	14%	40%	8%
	Video/DVD Player	10%	25%	6%
	Television	63%	86%	58%
	Radio/stereo	49%	72%	44%
	Sofa set	1%	2%	0%
	Dining set	97%	97%	97%
	Air conditioner	0%	0%	0%
	Sewing machine	4%	16%	1%
	Generator	3%	8%	1%
	Refrigerator	0%	0%	0%
	Electric fan	4%	16%	1%
Q6	Spending Priorities (average rank given to each expense category)			
	Food	8.6	8.6	8.5
	Health care	6.3	6.2	6.3
	Education	4.5	5.2	4.3
	Housing	1.7	1.8	1.6
	Clothing	4.5	4.7	4.5
	Agricultural inputs	3.9	3.6	4.0
	Productive assets	0.9	0.9	1.0
	Consumer goods	2.6	2.9	2.5
	Ceremonies/gifts	6.5	6.6	6.5
Q7	Median net annual <u>cash</u> income (USD)	\$439	\$702	\$355
Q7	<u>Cash</u> income sources (average percentage of total income)			
	Selling rice	12%	15%	7%
	Selling non-rice crops	3%	4%	3%
	Selling animal products	9%	8%	9%
	Farm labour	3%	2%	5%
	Non-farm labour	16%	13%	21%
	Business/trading	33%	40%	21%
	Salary	21%	17%	29%
	Gift from non-household members	1%	1%	1%
	Other	2%	0%	4%
Q8	Month of peak income (percentage out of all respondents)	=,0	- 70	.,0
Qυ	Jan	32%	32%	32%
	Feb	32%	26%	34%
	reb Mar	32% 35%	26% 38%	34% 35%
		35% 28%	38% 24%	35% 29%
	Apr May	28% 13%	24% 11%	29% 13%
	May			
	Jun	6% 7 %	5% 6%	6% 7%
	Jul	7%	6%	7%
	Aug	7%	4%	8%
	Sep	8%	8%	8%
	Oct	9%	11%	9%
	Nov	15%	18%	15%
	Dec	24%	24%	24%
00-	Constant income throughout the year	35%	36%	34%
Q9a	Wet season water sources (percentage out of all respondents)	4407	000/	00/
	Rainwater	11%	23%	8%
	River/stream (tonle/o)	9%	7%	10%
	Pond (srah)	5%	7%	5%
	Lake (boeung)	0%	0%	0%
	*Tube well	49%	43%	51%

No	Question	All	Latrine o	wnership
		Rural	Yes	No
	Unlined open well	14%	6%	16%
	Lined open well with cover	7%	7%	6%
	*Lined open well with cover	2%	2%	1%
	Water vendor	3%	3%	3%
	*Bottled water	0%	0%	0%
	*Piped water	0%	0%	0%
	Total improved water sources (*)	51%	45%	52%
Q9b	Dry season water sources (percentage out of all respondents)			
	Rainwater	0%	0%	0%
	River/stream (tonle/o)	11%	15%	11%
	Pond (srah)	7%	12%	6%
	Lake (boeung)	0%	0%	0%
	*Tube well	52%	51%	53%
	Unlined open well	16%	7%	18%
	Lined open well with cover	7%	6%	7%
	*Lined open well with cover	2%	4%	2%
	Water vendor	4%	5%	4%
	*Bottled water	0%	0%	0%
	*Piped water	0%	0%	0%
	Total improved water sources (*)	54%	55%	54%
Q10a	Treats drinking water (percentage out of all respondents)			
	Always	60%	79%	56%
	Sometimes	12%	9%	13%
	Never	28%	12%	32%
Q10b	Method of treating drinking water (percentage out of all respondents that treat			
	their water always or sometimes)			
	Boil	64%	93%	88%
	Filter	7%	11%	10%
	Chemical	2%	1%	3%
	Other	0%	0%	0%
Q11	Households that own a latrine (percentage out of all respondents)	19%	100%	0%
Q12	Type of latrine structure (percentage out of all respondents that own a latrine)			
Q12a	Below ground structure			
	Unlined pit	11%	11%	-
	Concrete rings	8%	8%	-
	Offset tank	80%	80%	-
	Piped sewerage	0%	0%	-
	Other	1%	1%	-
	Don't know	0%	0%	-
Q12b	Slab structure			
	Open hole-wooden slab	12%	12%	_
	Open hole-concrete slab	1%	1%	_
	Pour flush	87%	87%	_
	Western toilet bowl	0%	0%	_
	Other	0%	0%	_
Q12c	Shelter wall structure	070	070	
Q I Z	Concrete/brick	66%	66%	_
	Fibrous cement	2%	2%	_
	Galvanized steel	5%	5%	_
	Wood	5% 4%	5% 4%	-
	Thatch	4% 20%	4% 20%	-
				-
	Plastic sheet	0%	0%	-
	Salvaged material	1%	1%	-

No	Question	All	Latrine o	wnership
		Rural	Yes	No
	No walls	0%	0%	-
	Other	1%	1%	-
Q12d	Shelter roof structure			
	Concrete	1%	1%	-
	Fibrous cement	3%	3%	-
	Galvanized steel	76%	76%	-
	Tiles	0%	0%	-
	Thatch	14%	14%	-
	Plastic steel	0%	0%	-
	Salvaged material	0%	0%	-
	No roof	6%	6%	-
	Other	0%	0%	-
Q13	Average distance to latrine (meters)	7.8	7.8	-
Q14	Defecation location (percentage out of all respondents)			
	Adults			
Q14a	At home			
	On the ground	76%	2%	93%
	In a water body	1%	0%	1%
	In your own latrine	18%	97%	-
	In a neighbour's latrine	5%	0%	6%
	In a public latrine	0%	0%	0%
	Other	0%	0%	0%
Q14b	Away from home			
	On the ground	73%	43%	80%
	In a water body	0%	1%	0%
	In a public latrine	28%	59%	21%
	Other	1%	0%	1%
	Children (as a percentage of all households that have children)			
Q14c	At home			
	On the ground	80%	9%	94%
	In a water body	0%	0%	0%
	In your own latrine	15%	91%	-
	In a neighbour's latrine	3%	0%	4%
	In a public latrine	1%	0%	1%
	Other	0%	0%	1%
Q14d	Away from home			
	On the ground	84%	50%	90%
	In a water body	0%	0%	0%
	In a public latrine	16%	50%	9%
0446	Other	0%	0%	0%
Q14f	Location for disposal of infant feces (percentage out of all respondents)			
	On the ground	3.7%	1.1%	4.3%
	In a water body	0.2%	0.0%	0.2%
	In your own latrine	0.0%	0.0%	0.0%
	In a neighbour's latrine	0.0%	0.0%	0.0%
	In a public latrine	0.0%	0.0%	0.0%
	Other	0.2%	0.0%	0.2%
Q14g	Anal cleansing material (percentage out of all respondents)			
-	Water	25%	87%	11%
	Leaves	72%	25%	83%
	Paper	20%	16%	21%
	Other	1%	0%	1%

No	Question	All	Latrine o	wnership
		Rural	Yes	No
Q15	Larine advantages (percentage out of all respondents)			
	Improved hygiene/cleanliness	73%	81%	71%
	Improved health	50%	73%	45%
	More privacy	23%	41%	19%
	More comfortable	54%	66%	51%
	Convenience/save time	37%	49%	34%
	Improved safety	43%	46%	42%
	Improved status/prestige	19%	16%	19%
	No advantages	0%	1%	0%
	Don't know	1%	0%	1%
	Other	6%	6%	6%
Q16	Larine disadvantages (percentage out of all respondents)			
	Bad smell	5%	6%	5%
	Attracts flies	3%	1%	3%
	Cost to maintain it	5%	9%	5%
	Work to maintain it	4%	5%	4%
	Other people come to use it	2%	0%	3%
	Affects groundwater quality	1%	1%	1%
	No disadvantages	80%	77%	81%
	Don't know	6%	3%	6%
	Other	1%	6%	5%
Q17	Affordability perceptions (percentage out of all respondents)			
	At price \$100			
	Afford anytime	10%	25%	7%
	Afford at peak income	2%	0%	2%
	Afford after saving <2 months	2%	4%	1%
	Afford after saving >2 months	15%	27%	12%
	Never afford	71%	42%	77%
	At price \$80			
	Afford anytime	12%	27%	8%
	Afford at peak income	2%	0%	2%
	Afford after saving <2 months	5%	12%	3%
	Afford after saving >2 months	18%	27%	16%
	Never afford	63%	33%	70%
	At price \$60	3370	33,5	. 676
	Afford anytime	14%	29%	10%
	Afford at peak income	4%	1%	4%
	Afford after saving <2 months	10%	13%	9%
	Afford after saving >2 months	20%	33%	18%
	Never afford	52%	21%	59%
	At price \$40	0270	2170	0070
	Afford anytime	20%	37%	16%
	Afford at peak income	7%	6%	7%
	Afford after saving <2 months	14%	18%	13%
	Afford after saving >2 months	20%	29%	18%
	Never afford	39%	8%	46%
	At price \$20	33 /0	0 /0	-10 /0
	Afford anytime	35%	46%	32%
	·	9%	46% 5%	10%
	Afford after soving <2 months	9% 11%		
	Afford after saving <2 months		14% 27%	11% 26%
	Afford after saving >2 months	26%	27%	
	Never afford Average expected price for each pictured option (all respondents)	18%	4%	21%

No	Question	All	Latrine o	wnership
		Rural	Yes	No
	Latrine type A	\$12	\$16	\$12
	Latrine type B	\$31	\$42	\$29
	Latrine type C	\$86	\$117	\$78
Q19	Reason for purchase (percentage out of respondents that own a latrine)			
	Improved hygiene/cleanliness	83%	83%	-
	Improved health	67%	67%	-
	More privacy	46%	46%	_
	More comfortable	36%	36%	_
	Convenience/save time	59%	59%	_
	Improved safety	53%	53%	_
	Improved status/prestige	24%	24%	_
	Don't know	0%	0%	_
	Other	2%	2%	_
Q20	Place of purchase (percentage out of respondents that own a latrine)	270	270	-
QZO	NGO	16%	16%	
	Health Center			-
		1%	1%	-
	Commune Council	1%	1%	-
	Village Development Committee	0%	0%	-
	Village Health Worker	0%	0%	-
	Local craftsman	11%	11%	-
	Local market dealers	67%	67%	-
	Other villagers	1%	1%	-
	Built it yourself	13%	13%	-
	Don't know	1%	1%	-
	Other	8%	8%	-
Q21	Average age of latrine (years)	4.4	4.4	-
Q22	Median amount paid for latrine in US\$	\$115	\$115	-
Q23	Decision maker (percentage out of all respondents that own a latrine)			
	Adult male in household	87%	87%	-
	Adult female in household	83%	83%	_
	Children in household	0%	0%	_
	Pesons outside of household	2%	2%	_
	Don't know	1%	1%	_
Q24	Purchaser (percentage out of all respondents that own a latrine)	.,,	. , 0	
	Adult male in household	83%	83%	_
	Adult female in household	60%	60%	_
	Children in household	1%	1%	-
	Persons outside of household	2%	2%	-
	Don't know			-
Q25	Have thought about or discussed purchasing a latrine (percentage out of all	1% 77%	1% -	- 77%
	respondents that do not own a latrine)			
Q26	Perceived purchase place (percentage out of all respondents that do not own			
	a latrine)			
	NGO	12%	-	12%
	Health Center	0%	-	0%
	Commune Council	0%	-	0%
	Village Development Committee	0%	-	0%
	Village Health Worker	0%	-	0%
	Local craftsman	13%	-	13%
	Local market dealers	64%	-	64%
	Other will grown	2%		00/
	Other villagers	270	-	2%
	Built it yourself	11%	- -	2% 11%

No	Question	All	Latrine o	wnership
	aussiisii	Rural	Yes	No
	Other	6%	-	6%
Q27	Perceived decision maker (percentage out of all respondents that do not own a latrine)			
	Adult male in household	87%		87%
	Adult female in household	83%	-	83%
	Children in household	1%	-	1%
	Persons outside of household	1%	-	1%
	Don't know	6%	-	6%
Q28	Perceived purchaser (percentage out of all respondents that do not own a latrine)			
	Adult male in household	69%	-	69%
	Adult female in household	35%	-	35%
	Children in household	0%	-	0%
	Persons outside of household	0%	-	0%
	Don't know	6%	-	6%
Q29	Reason for not having latrine (percentage out of all respondents that do not own a latrine)			
	Too expensive/don't have enough money	95%	-	95%
	Have access to someone else's latrine already	2%	-	2%
	Satisfied with current practice/don't see a need	4%	-	4%
	Lack information on where to purchase a latrine	2%	-	2%
	Other priorities come first	19%	-	19%
	Don't know	1%	-	1%
	Other	0%	-	0%
Q30	Sanitation advice received (percentage out of all respondents)			
	Drink safe water	79%	80%	79%
	Use a latrine	55%	66%	53%
	Wash hands/face/body	61%	63%	60%
	Food hygiene	61%	65%	60%
	Other	0%	0%	0%
	None	14%	14%	14%
Q31	Source of sanitation advice (percentage out of all respondents)			
	Own family	26%	35%	24%
	Other villagers	2%	5%	2%
	NGO worker	29%	32%	28%
	Health Center	40%	35%	41%
	Commune Council	12%	8%	13%
	Village Development Committee	7%	3%	8%
	Village Health Worker	20%	21%	19%
	Physician/nurse/pharmacist	7%	11%	6%
	Schools/teachers	13%	13%	13%
	Wat/religious leaders	1%	2%	1%
	TV	52%	61%	50%
	Radio	32%	32%	32%
	Newspaper/magazine	1%	4%	0%
	Billboard	0%	0%	0%
	Don't know	2%	0%	2%
	Other	0%	0%	0%
Q32	Trustworthiness of sanitation information sources (percentage out of all respondents)			
	Own family			
	Very good source of sanitation information	64%	66%	63%
	Somewhat good source of sanitation information	9%	11%	9%
	Not a good source of sanitation information	4%	4%	4%

No	Question	All	Latrine o	wnership
		Rural	Yes	No
	Don't know	9%	4%	10%
	Other villagers			
	Very good source of sanitation information	32%	33%	32%
	Somewhat good source of sanitation information	25%	26%	25%
	Not a good source of sanitation information	10%	9%	10%
	Don't know	19%	18%	20%
	NGO worker			
	Very good source of sanitation information	70%	74%	69%
	Somewhat good source of sanitation information	7%	7%	7%
	Not a good source of sanitation information	2%	2%	3%
	Don't know	6%	2%	7%
	Health Center			
	Very good source of sanitation information	77%	78%	76%
	Somewhat good source of sanitation information	4%	3%	4%
	Not a good source of sanitation information	1%	0%	1%
	Don't know	5%	4%	5%
	Physician			
	Very good source of sanitation information	71%	73%	71%
	Somewhat good source of sanitation information	5%	4%	6%
	Not a good source of sanitation information	2%	1%	2%
	Don't know	8%	7%	8%
	Nurse			
	Very good source of sanitation information	37%	41%	36%
	Somewhat good source of sanitation information	25%	18%	26%
	Not a good source of sanitation information	7%	9%	6%
	Don't know	17%	17%	17%
	Pharmacist			
	Very good source of sanitation information	37%	42%	35%
	Somewhat good source of sanitation information	26%	24%	26%
	Not a good source of sanitation information	7%	5%	8%
	Don't know	16%	14%	16%
	Village Health Worker			
	Very good source of sanitation information	54%	56%	53%
	Somewhat good source of sanitation information	13%	13%	14%
	Not a good source of sanitation information	6%	6%	6%
	Don't know	13%	11%	13%
	Commune Council			
	Very good source of sanitation information	49%	47%	50%
	Somewhat good source of sanitation information	16%	16%	16%
	Not a good source of sanitation information	6%	6%	6%
	Don't know	14%	16%	14%
	Village Development Committee			
	Very good source of sanitation information	44%	45%	43%
	Somewhat good source of sanitation information	17%	18%	17%
	Not a good source of sanitation information	7%	7%	7%
	Don't know	18%	15%	19%
	Schools/teachers			
	Very good source of sanitation information	54%	59%	53%
	Somewhat good source of sanitation information	9%	6%	10%
	Not a good source of sanitation information	6%	8%	5%
	Don't know	17%	12%	18%
	Wat/religious leaders			
	Very good source of sanitation information	38%	41%	37%
	Wat/religious leaders			

No	Question	All	Latrine o	wnership
		Rural	Yes	No
	Somewhat good source of sanitation information	17%	18%	17%
	Not a good source of sanitation information	6%	8%	6%
	Don't know	25%	18%	26%
	Local craftsman			
	Very good source of sanitation information	15%	17%	15%
	Somewhat good source of sanitation information	20%	23%	19%
	Not a good source of sanitation information	16%	13%	17%
	Don't know	35%	33%	35%
	Local market dealers			
	Very good source of sanitation information	16%	17%	16%
	Somewhat good source of sanitation information	19%	21%	18%
	Not a good source of sanitation information	14%	9%	15%
	Don't know	37%	38%	37%
Q33a	Radio listening (percentage out of all respondents)			
	Daily	42%	49%	41%
	Weekly	1%	2%	1%
	Less than once a week	6%	11%	5%
	Rarely/Never	49%	37%	52%
Q34a	TV watching (percentage out of all respondents)			
	Daily	60%	79%	56%
	Weekly	3%	3%	2%
	Less than once a week	8%	4%	9%
	Rarely/Never	28%	13%	32%
Q35a	Newspaper reading (percentage out of all respondents)			
	Daily	0%	1%	0%
	Weekly	1%	3%	0%
	Less than once a week	6%	7%	6%
	Rarely/Never	90%	85%	91%
Q36	Disabled person in the household (percentage out of all respondents)	3.9%	4.2%	3.8%
	Disabled person able to defecate (percentage out of all disabled respondents in category)			
Q39	Assisted	1%	25%	19%
Q39	Unassisted	3%	75%	81%
Q40	Disabled person uses a device to assist them in defecating (percentage out of all disabled respondents)	20%	0%	20%

Dash (-) signifies not applicable

URBAN AREAS REPORT

							
No	Question	AII		wnership			
	Tatal acceptance of all and	Urban	Yes	No 10			
Q0a	Total number of villages	14	12	12			
Q0b	Total number of communes	12	10	10			
Q0c	Total number of districts	6	5	4			
Q0d	Total number of questionnaires	390	228	162			
Q0e	Average age of respondent (person who answered the questionnaire)	41.6	42.0	41.0			
Q0f	Female respondents (person who answered the questionnaire)	64%	62%	67%			
Q1 Q1b	Average household size	5.2 25.4	5.2 26.4	5.2 24.1			
	Average age of all households (percentage out of all households)	25.4 27%	23%	34%			
Q1c Q1d	Female headed households (percentage out of all households) Average years of education for those over 18 years	6.0	6.8	4.6			
	Have had at least one case of diarrhea in the past 2 weeks (percentage out of	7.1%	7.5%	6.4%			
Q1e	all people in respondent households)						
Q1b	Under-5 population (percentage out of all people in respondent households)	8.4%	6.4%	11.0%			
Q1e	Under-5 that have had one or more cases of diarrhea in the past 2 weeks (percentage out of all under-5s)	33%	39%	28%			
Q2a	Households that own agricultural land (percentage out of all respondents)	30%	21%	44%			
Q2b	Average land size for respondents that own agricultural land (ha)	1.0	1.1	0.95			
Q3a	Households that own their residential property (percentage out of all respondents)	87%	88%	86%			
Q3b	Households that have residential land title (percentage out of all respondents that own their residential land)	58%	68%	45%			
Q3c	Residential land flooding (percentage out of all respondents)						
	Never	45%	52%	35%			
	Sometimes	40%	37%	43%			
	Every year	15%	11%	22%			
Q4	Roof construction material (percentage out of all respondents)						
	Concrete	3%	4%	1%			
	Fibrous cement	6%	6%	6%			
	Galvanized steel	62%	60%	65%			
	Tiles	22%	28%	14%			
	Thatch	7%	2%	15%			
	Plastic sheet	0%	0%	0%			
	Salvaged material	0%	0%	0%			
	Other	0%	0%	0%			
Q5	Asset ownership (percentage out of all respondents)						
	Plough	15%	7%	25%			
	Harrow/rake	13%	7%	22%			
	Ox-cart	10%	5%	16%			
	Semi tractor ko yun	1%	1%	2%			
	Tractor	0%	0%	0%			
	Manual water pump	19%	16%	23%			
	Engine-powered water pump	6%	4%	8%			
	Rice mill	0%	0%	0%			
	Threshing machine	0%	0%	1%			
	Cattle/oxen/buffalo	16%	9%	27%			
	Pigs	16%	12%	21%			
	Car	4%	7%	1%			
	Motorcycle	61%	78%	36%			
	Bicycle	68%	72%	63%			
	Row boat	2%	0%	4%			
	Moto boat	0%	0%	0%			

No	Question	All	Latrine o	wnership
		Urban	Yes	No
	Telephone/cell phone	36%	49%	19%
	Video/DVD Player	27%	38%	12%
	Television	79%	90%	63%
	Radio/stereo	53%	61%	41%
	Sofa set	7%	12%	1%
	Dining set	97%	98%	97%
	Air conditioner	1%	1%	1%
	Sewing machine	8%	11%	2%
	Generator	1%	2%	0%
	Refrigerator	1%	2%	0%
	Electric fan	38%	56%	12%
Q6	Spending Priorities (average rank given to each expense category)			
	Food	8.8	8.7	8.8
	Health care	6.0	5.9	6.2
	Education	4.8	5.2	4.1
	Housing	2.0	2.2	1.7
	Clothing	4.7	5.0	4.4
	Agricultural inputs	0.8	0.5	1.4
	Productive assets	0.7	0.6	0.7
	Consumer goods	3.2	3.5	2.8
	Ceremonies/gifts	6.1	6.0	6.2
Q7	Median net annual <u>cash</u> income (USD)	\$673	\$890	\$445
Q7	Cash income sources (average percentage of total income)			
	Selling rice	4%	29%	20%
	Selling non-rice crops	3%	21%	24%
	Selling animal products	5%	21%	25%
	Farm labour	4%	9%	2%
	Non-farm labour	23%	7%	2%
	Business/trading	23%	5%	3%
	Salary	24%	3%	3%
	Gift from non-household members	11%	1%	20%
	Other	3%	4%	1%
Q8	Month of peak income (percentage out of all respondents)			
	Jan	15%	11%	20%
	Feb	18%	15%	23%
	Mar	22%	18%	27%
	Apr	16%	15%	17%
	May	7%	5%	9%
	Jun	4%	3%	6%
	Jul	4%	3%	5%
	Aug	3%	2%	4%
	Sep	5%	4%	7%
	Oct	8%	10%	7%
	Nov	9%	8%	11%
	Dec	10%	7%	15%
	Constant income throughout the year	69%	77%	58%
Q9a	Wet season water sources (percentage out of all respondents)			
	Rainwater	4%	4%	3%
	River/stream (tonle/o)	0%	0%	0%
	Pond (srah)	0%	0%	0%
	Lake (boeung)	0%	0%	0%
	*Tube well	50%	42%	62%
	Unlined open well	5%	4%	6%
	Offilia opon woll	J /0	7/0	0 /0

No	Question	All Urban	Latrine o	Latrine ownership	
			Yes	No	
	Lined open well with cover	11%	7%	17%	
	*Lined open well with cover	1%	2%	1%	
	Water vendor	9%	9%	9%	
	*Bottled water	0%	0%	0%	
	*Piped water	21%	33%	2%	
	Total improved water sources (*)	72%	77%	65%	
Q9b	Dry season water sources (percentage out of all respondents)				
	Rainwater	0%	0%	0%	
	River/stream (tonle/o)	0%	0%	0%	
	Pond (srah)	0%	0%	0%	
	Lake (boeung)	0%	0%	0%	
	*Tube well	51%	43%	63%	
	Unlined open well	6%	4%	7%	
	Lined open well with cover	11%	7%	17%	
	*Lined open well with cover	1%	2%	1%	
	Water vendor	9%	9%	9%	
	*Bottled water	0%	0%	0%	
	*Piped water	22%	35%	4%	
	Total improved water sources (*)	74%	79%	67%	
Q10a	Treats drinking water (percentage out of all respondents)				
	Always	84%	92%	73%	
	Sometimes	5%	3%	8%	
	Never	11%	5%	19%	
Q10b	Method of treating drinking water (percentage out of all respondents that treat their water always or sometimes)				
	Boil	80%	89%	91%	
	Filter	4%	4%	5%	
	Chemical	1%	1%	0%	
	Other	6%	8%	4%	
Q11	Households that own a latrine (percentage out of all respondents)	58%	100%	0%	
Q12	Type of latrine structure (percentage out of all respondents that own a latrine)				
Q12a	Below ground structure				
	Unlined pit	2%	2%	-	
	Concrete rings	4%	4%	-	
	Offset tank	72%	72%	-	
	Piped sewerage	21%	21%	-	
	Other	0%	0%	-	
	Don't know	0%	0%	-	
Q12b	Slab structure				
	Open hole-wooden slab	2%	2%	-	
	Open hole-concrete slab	0%	0%	-	
	Pour flush	97%	97%	-	
	Western toilet bowl	1%	1%	-	
	Other	0%	0%	-	
Q12c	Shelter wall structure				
	Concrete/brick	67%	67%	-	
	Fibrous cement	0%	0%	-	
	Galvanized steel	13%	13%	-	
	Wood	12%	12%	-	
	Thatch	5%	5%	-	
	Plastic sheet	0%	0%	-	
	Salvaged material	2%	2%	-	
	No walls	0%	0%	-	
		- / 0	- / 0		

No	Question	All	Latrine o	wnership
		Urban	Yes	No
	Other	0%	0%	-
Q12d	Shelter roof structure			
	Concrete	7%	7%	-
	Fibrous cement	3%	3%	-
	Galvanized steel	74%	74%	-
	Tiles	3%	3%	-
	Thatch	6%	6%	-
	Plastic steel	1%	1%	-
	Salvaged material	2%	2%	-
	No roof	4%	4%	-
	Other	0%	0%	-
Q13	Average distance to latrine (meters)	2.7	2.7	-
Q14	Defecation location (percentage out of all respondents)			
	Adults			
Q14a	At home			
	On the ground	28%	0%	68%
	In a water body	1%	0%	1%
	In your own latrine	58%	100%	-
	In a neighbour's latrine	11%	0%	27%
	In a public latrine	1%	0%	3%
	Other	0%	0%	0%
Q14b	Away from home			
	On the ground	34%	8%	69%
	In a water body	0%	0%	0%
	In a public latrine	67%	93%	32%
	Other	1%	0%	1%
	Children (as a percentage of households with children)			
Q14c	At home			
	On the ground	34%	2%	74%
	In a water body	1%	1%	1%
	In your own latrine	55%	97%	-
	In a neighbour's latrine	9%	0%	21%
	In a public latrine	2%	1%	3%
	Other	0%	0%	0%
Q14d	Away from home			
	On the ground	49%	26%	77%
	In a water body	0%	1%	0%
	In a public latrine	51%	73%	23%
	Other	0%	0%	1%
Q14f	Location for disposal of infant feces (percentage out of all respondents)			
	On the ground	3.3%	0.4%	7.4%
	In a water body	0.0%	0.0%	0.0%
	In your own latrine	2.3%	4.0%	0.0%
	In a neighbour's latrine	0.3%	0.4%	0.0%
	In a public latrine	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%
Q14g	Anal cleansing material (percentage out of all respondents)			
	Water	74%	100%	36%
	Leaves	25%	1%	59%
	Paper	9%	7%	12%
	Other	0%	0%	0%
Q15	Latrine advantages (percentage out of all respondents)			
	Improved hygiene/cleanliness	81%	88%	70%

No	Question	All	Latrine o	wnership
	l (Urban	Yes	No
	Improved health	49%	59%	35%
	More privacy	33%	38%	27%
	More comfortable	59%	71%	41%
	Convenience/save time	47%	44%	52%
	Improved safety	47%	48%	45%
	Improved status/prestige	16%	11%	24%
	No advantages	1%	0%	1%
	Don't know	1%	0%	1%
	Other	2%	0%	4%
Q16	Latrine disadvantages (percentage out of all respondents)			
	Bad smell	8%	11%	4%
	Attracts flies	4%	4%	3%
	Cost to maintain it	4%	6%	1%
	Work to maintain it	4%	5%	2%
	Other people come to use it	0%	0%	0%
	Affects groundwater quality	0%	0%	0%
	No disadvantages	86%	83%	90%
	Don't know	1%	0%	2%
	Other	0%	11%	4%
Q17	Affordability perceptions (percentage out of all respondents)			
	At price \$100			
	Afford anytime	17%	23%	8%
	Afford at peak income	2%	0%	4%
	Afford after saving <2 months	2%	3%	1%
	Afford after saving >2 months	17%	22%	10%
	Never afford	62%	52%	77%
	At price \$80			
	Afford anytime	18%	25%	8%
	Afford at peak income	3%	2%	4%
	Afford after saving <2 months	5%	7%	2%
	Afford after saving >2 months	18%	21%	14%
	Never afford	56%	46%	72%
	At price \$60			
	Afford anytime	23%	30%	13%
	Afford at peak income	3%	3%	4%
	Afford after saving <2 months	10%	12%	6%
	Afford after saving >2 months	18%	18%	17%
	Never afford	46%	36%	59%
	At price \$40	1070	0070	0070
	Afford anytime	29%	38%	17%
	Afford at peak income	3%	3%	4%
	Afford after saving <2 months	13%	13%	12%
	Afford after saving >2 months	19%	16%	23%
	Never afford	36%	30%	44%
	At price \$20	0070	3070	1170
	Afford anytime	40%	49%	28%
	Afford at peak income	4%	3%	6%
	Afford after saving <2 months	11%	10%	13%
	Afford after saving <2 months	20%	14%	29%
	Never afford	24%	24%	29% 24%
Q18		Z+ 70	Z+ /0	∠+ /0
QIO	Average expected price for each pictured option (all respondents)	¢40	¢11	¢о
	Latrine type A	\$12 \$25	\$14 \$41	\$8 \$27
	Latrine type B	\$35	\$41	\$27

No	Question	All	Latrine o	wnership
		Urban	Yes	No
0.40	Latrine type C	\$94	\$112	\$67
Q19	Reason for purchase (percentage out of respondents that own a latrine)			
	Improved hygiene/cleanliness	81%	81%	_
	Improved health	63%	63%	_
	More privacy	46%	46%	_
	More comfortable	32%	32%	_
	Convenience/save time	57%	57%	_
	Improved safety	52%	52%	_
	Improved status/prestige	15%	15%	_
	Don't know	0%	0%	_
	Other	0%	0%	=
Q20	Place of purchase (percentage out of respondents that own a latrine)			
	NGO	5%	5%	_
	Health Center	0%	0%	_
	Commune Council	0%	0%	_
	Village Development Committee	0%	0%	_
	Village Health Worker	1%	1%	_
	Local craftsman	13%	13%	_
	Local market dealers	83%	83%	_
	Other villagers	1%	1%	_
	Built it yourself	7%	7%	_
	Don't know	5%	5%	_
	Other	4%	4%	_
Q21	Average age of latrine (years)	5.1	5.1	_
Q22	Average amount paid for latrine in US\$	\$100	\$100	_
Q23	Decision maker (percentage out of all respondents that own a latrine)			
	Adult male in household	89%	89%	_
	Adult female in household	83%	83%	-
	Children in household	2%	2%	-
	Pesons outside of household	1%	1%	-
	Don't know	2%	2%	-
Q24	Purchaser (percentage out of all respondents that own a latrine)			
	Adult male in household	89%	89%	-
	Adult female in household	52%	52%	-
	Children in household	0%	0%	-
	Persons outside of household	0%	0%	-
	Don't know	2%	2%	-
Q25	Have thought about or discussed purchasing a latrine (percentage out of all	76%	-	76%
	respondents that do not own a latrine)			
Q26	Perceived purchase place (percentage out of all respondents that do not own a			
	latrine) NGO	400/		120/
	Health Center	12% 0%	-	12% 0%
	Commune Council		-	0% 1%
	Village Development Committee	1% 1%	-	1%
	Village Health Worker	1% 0%	-	0%
	Local craftsman	13%	-	13%
	Local market dealers		-	
	Other villagers	61%	-	61%
	Built it yourself	1% 9%	-	1% 9%
	Don't know	9% 16%	-	9% 16%
	Other	12%	-	12%
	S	1470	-	1270

No	Question	All	Latrine o	wnership
		Urban	Yes	No
Q27	Perceived decision maker (percentage out of all respondents that do not own a			
	latrine)	000/		000/
	Adult famale in household	86%		86%
	Adult female in household	85%	-	35%
	Children in household	0%	-	0%
	Persons outside of household	1%	-	0%
000	Don't know	8%	-	8%
Q28	Perceived purchaser (percentage out of all respondents that do not own a latrine)			
	Adult male in household	84%	_	84%
	Adult female in household	42%	_	42%
	Children in household	0%	_	0%
	Persons outside of household	0%	-	0%
	Don't know	8%	-	8%
Q29	Reason for not having latrine (percentage out of all respondents that do not own a latrine)			
	Too expensive/don't have enough money	95%	_	95%
	Have access to someone else's latrine already	1%	_	1%
	Satisfied with current practice/don't see a need	4%	_	4%
	Lack information on where to purchase a latrine	0%	_	0%
	Other priorities come first	30%	_	30%
	Don't know	2%	_	2%
	Other	0%	_	0%
Q30	Sanitation advice received (percentage out of all respondents)			
	Drink safe water	77%	78%	77%
	Use a latrine	58%	61%	52%
	Wash hands/face/body	64%	65%	62%
	Food hygiene	61%	65%	56%
	Other	0%	0%	1%
	None	20%	19%	22%
Q31	Source of sanitation advice (percentage out of all respondents)			
	Own family	37%	43%	30%
	Other villagers	6%	6%	5%
	NGO worker	22%	18%	27%
	Health Center	31%	29%	34%
	Commune Council	15%	11%	20%
	Village Development Committee	11%	9%	12%
	Village Health Worker	12%	8%	18%
	Physician/nurse/pharmacist	3%	3%	2%
	Schools/teachers	14%	14%	14%
	Wat/religious leaders	2%	2%	1%
	TV	63%	69%	55%
	Radio	31%	31%	30%
	Newspaper/magazine	0%	0%	0%
	Billboard	0%	0%	0%
	Don't know	1%	1%	1%
	Other	0%	0%	0%
Q32	Trustworthiness of sanitation information sources (percentage out of all respondents)	0,0	0,0	070
	Own family			
	Very good source of sanitation information	63%	68%	56%
	Somewhat good source of sanitation information	4%	5%	3%
	Not a good source of sanitation information	1%	1%	1%
	Don't know	12%	7%	19%

No	Question	All	Latrine ownership	
		Urban	Yes	No
	Other villagers	•		•
	Very good source of sanitation information	34%	41%	25%
	Somewhat good source of sanitation information	20%	20%	20%
	Not a good source of sanitation information	5%	4%	6%
	Don't know	21%	16%	27%
	NGO worker			
	Very good source of sanitation information	68%	70%	65%
	Somewhat good source of sanitation information	4%	4%	4%
	Not a good source of sanitation information	0%	0%	0%
	Don't know	7%	6%	9%
	Health Center			
	Very good source of sanitation information	71%	74%	65%
	Somewhat good source of sanitation information	1%	1%	1%
	Not a good source of sanitation information	1%	0%	1%
	Don't know	7%	5%	10%
	Physician			
	Very good source of sanitation information	65%	72%	55%
	Somewhat good source of sanitation information	2%	1%	3%
	Not a good source of sanitation information	2%	1%	4%
	Don't know	11%	7%	17%
	Nurse			
	Very good source of sanitation information	35%	40%	27%
	Somewhat good source of sanitation information	20%	24%	14%
	Not a good source of sanitation information	5%	3%	7%
	Don't know	20%	13%	30%
	Pharmacist			
	Very good source of sanitation information	37%	43%	28%
	Somewhat good source of sanitation information	16%	20%	11%
	Not a good source of sanitation information	5%	4%	7%
	Don't know	21%	14%	32%
	Village Health Worker			
	Very good source of sanitation information	45%	50%	38%
	Somewhat good source of sanitation information	15%	15%	14%
	Not a good source of sanitation information	5%	3%	7%
	Don't know	16%	12%	20%
	Commune Council			
	Very good source of sanitation information	48%	50%	45%
	Somewhat good source of sanitation information	14%	18%	7%
	Not a good source of sanitation information	5%	3%	7%
	Don't know	13%	10%	19%
	Village Development Committee			
	Very good source of sanitation information	40%	43%	35%
	Somewhat good source of sanitation information	17%	20%	14%
	Not a good source of sanitation information	7%	6%	9%
	Don't know	16%	12%	21%
	Schools/teachers			
	Very good source of sanitation information	52%	55%	46%
	Somewhat good source of sanitation information	8%	10%	6%
	Not a good source of sanitation information	2%	3%	1%
	Don't know	18%	13%	26%
	Wat/religious leaders			
	Very good source of sanitation information	36%	43%	25%
	Somewhat good source of sanitation information	12%	14%	10%

No	Question	All	Latrine o	wnership
		Urban	Yes	No
	Not a good source of sanitation information	5%	5%	6%
	Don't know	26%	18%	38%
	Local craftsman			
	Very good source of sanitation information	19%	22%	14%
	Somewhat good source of sanitation information	14%	16%	11%
	Not a good source of sanitation information	14%	13%	15%
	Don't know	32%	28%	38%
	Local market dealers			
	Very good source of sanitation information	20%	24%	14%
	Somewhat good source of sanitation information	15%	17%	12%
	Not a good source of sanitation information	10%	10%	11%
	Don't know	33%	29%	40%
Q33a	Radio listening (percentage out of all respondents)			
	Daily	45%	50%	37%
	Weekly	2%	1%	3%
	Less than once a week	3%	3%	4%
	Rarely/Never	49%	46%	54%
Q34a	TV watching (percentage out of all respondents)			
	Daily	75%	81%	65%
	Weekly	2%	2%	3%
	Less than once a week	4%	4%	5%
	Rarely/Never	18%	12%	26%
Q35a	Newspaper reading (percentage out of all respondents)			
	Daily	4%	5%	2%
	Weekly	2%	3%	2%
	Less than once a week	7%	9%	3%
	Rarely/Never	85%	80%	91%
Q36	Disabled person in the household (percentage out of all respondents)	3.3%	2.2%	4.9%
	Disabled person able to defecate (percentage out of all disabled respondents)			
Q39	Assisted	38%	40%	37%
Q39	Unassisted	62%	60%	63%
Q40	Disabled person uses a device to assist them in defecating (percentage out of all disabled respondents)	54%	60%	50%

Dash (-) signifies not applicable

SPECIAL CASE AREAS REPORT

Total number of villages 2	No	Question	All	Latrine o	Latrine ownership	
00a Total number of villages 2			I			
QOC Total number of districts 2 2 2 QOC Total number of questionnaires 37 21 16 QOR Average age of respondent (person who answered the questionnaire) 41.3 42.8 39.3 QOC Female respondents (person who answered the questionnaire) 70% 67% 75% QU Average age of all household members Female headed households (percentage out of all households) 20% 10% 31% QU Average vaers of education for those over 18 years 40 <td>Q0a</td> <td>Total number of villages</td> <td></td> <td></td> <td></td>	Q0a	Total number of villages				
Octobal Average age of respondent (person who answered the questionnaire)	Q0b	Total number of communes	2	2	2	
Q0e Average age of respondent (person who answered the questionnaire) 41.3 42.8 39.3 Q0f Female respondents (person who answered the questionnaire) 70% 67% 75% Q1 Average age of all households per on who answered the questionnaire) 5.16 4.86 5.56 Q1b Average age of all households (percentage out of all households) 20% 10% 31% Q1c Average years of education for those over 18 years 4.86 6% 6% 6% 7% Q1d Average years of education for those over 18 years 4.86 6% 6% 6% 7% Q1b Under-5 population (percentage out of all people in respondent households) 7% 10% 4% Q1b Under-5 population (percentage out of all people in respondent households) 27% 20% 25% <td>Q0c</td> <td>Total number of districts</td> <td>2</td> <td>2</td> <td>2</td>	Q0c	Total number of districts	2	2	2	
Average household size Average age of all households Average age of all households (percentage out of all households) 20% 10% 31	Q0d	Total number of questionnaires	37	21	16	
Q1 Average household size 5.16 4.86 5.56 Q1b Average age of all household members 10% 31% Q1c Female headed households (percentage out of all households) 20% 10% 31% Q1d Average years of education for those over 18 years 6% 6% 7% Q1b Under-5 population (percentage out of all people in respondent households) 7% 10% 4% Q1e Under-5 that have had one or more cases of diarrhea in the past 2 weeks (percentage out of all under-5s) 21% 20% 25% Q7 Median net annual gash income (USD) \$268 \$415 \$243 Q12 Type of latrine structure (percentage out of all respondents that own a latrine) 57% \$243 Q12 Below ground structure \$21% 20% 25% Q12 Below ground structure \$19% 19% - Q12 Below ground structure \$19% 19% - Q12 Septic tank 19% 19% - Q12 Septic tank 19% 19% <td>Q0e</td> <td>Average age of respondent (person who answered the questionnaire)</td> <td>41.3</td> <td>42.8</td> <td>39.3</td>	Q0e	Average age of respondent (person who answered the questionnaire)	41.3	42.8	39.3	
Q1b Average age of all household members 20% 10% 31% C1c Female headed households (percentage out of all households) 20% 10% 31% C1c Have had at least one case of diarrhea in the past 2 weeks (percentage out of all people in respondent households) 6% 6% 7% C1b Under-5 population (percentage out of all people in respondent households) 7% 10% 4% C1c Under-5 population (percentage out of all people in respondent households) 21% 20% 25% C1c Under-5 that have had one or more cases of diarrhea in the past 2 weeks (percentage out of all under-5s) 21% 20% 25% C1c Median net annual cash income (USD) 58 \$243 \$243 C1c Under-5 that have had one or more cases of diarrhea in the past 2 weeks (percentage out of all under-5s) 21% \$268 \$415 \$243 C1c Bellow ground structure 57% \$268 \$415 \$243 C112 Bellow ground structure 81% 81% \$1% \$1 \$2 C112 Unlined pit 81% 81%	Q0f	Female respondents (person who answered the questionnaire)	70%	67%	75%	
Q1c Female headed households (percentage out of all households) 20% 10% 31% Q1d Average years of education for those over 18 years Female head at least one case of diarhea in the past 2 weeks (percentage out of all people in respondent households) 6% 6% 7% Q1b Under-5 population (percentage out of all people in respondent households) 7% 10% 4% Q1e Under-5 that have had one or more cases of diarrhea in the past 2 weeks (percentage out of all under-5s) 21% 20% 25% Q7 Median net annual cash income (USD) 328 2415 3243 Q12 Type of latrine structure (percentage out of all respondents that own a latrine) 57% 57% Q12 Type of latrine structure (percentage out of all respondents that own a latrine) 57% 578 Q12 Below ground structure 57% 67% 67% Q12 Below ground structure 81% 81% 6 Q12 Unlined pit 81% 81% 6 Q12 Septic tank 19% 19% 9 Q12 Septic tank 19%	Q1	Average household size	5.16	4.86	5.56	
Average years of education for those over 18 years Have had at least one case of diarrhea in the past 2 weeks (percentage out of all people in respondent households) 7% 10% 4%	Q1b	Average age of all household members				
Auto-	Q1c	Female headed households (percentage out of all households)	20%	10%	31%	
all people in respondent households 1	Q1d	Average years of education for those over 18 years				
Q1b Under-5 population (percentage out of all people in respondent households) 7% 10% 4% C1e Under-5 that have had one or more cases of diarrhea in the past 2 weeks (percentage out of all under-5s) 21% 20% 25% Q7 Median net annual cash income (USD) 5ce \$415 \$243 Q12 Type of latrine structure (percentage out of all respondents that own a latrine) 5cm 5cm 5cm Q12 Below ground structure 81% 81% 5cm Q12 Unlined pit 81% 81% 5cm Q2 Open doil 90% 90% 5cm Q3 Opin 90% 90% 5cm Q4 Other 00% 90% 5cm Q4 Other 00% 90% 5cm Q4 Other 00% 90% 5cm Q4 Other 00m 90% 5cm Q4 Other 00m 90% 5cm Q5 Sbl structure 00m 90%	Q1e	• • • • • • • • • • • • • • • • • • • •				
Q1e Under-5 that have had one or more cases of diarrhea in the past 2 weeks (percentage out of all under-5s) 21% 20% 25% Q7 Median net annual <u>cash</u> income (USD) \$268 \$415 \$243 Q12 Type of latrine structure (percentage out of all respondents that own a latrine) 57% ************************************	0.11		6%	6%	7%	
Q16 (per centage out of all under-5s)s (per centage out of all under-ship s (per centage out of all under interpretage out of a	Q1b	Under-5 population (percentage out of all people in respondent households)	70/	100/	40/	
Command Comm	01e	Under-5 that have had one or more cases of diarrhea in the nast 2 weeks	170	10%	4%	
Q7 Median net annual cash income (USD) \$243 Q12 Type of latrine structure (percentage out of all respondents that own a latrine) 57% Q12a Below ground structure 77 Q12b Below ground structure 81% 81% - Q12c Unlined pit 81% 81% - Q2c Concrete rings 0% 0% 0% - Q2c Septic tank 19% 19% - - Piped sewerage 0% 0% 0% - - Other 0bn't know 0% 0% 0% - Q2c Shab structure 81% 81% - Q2c Open hole-wooden slab 19% 19% - Q2c Open hole-wooden slab 19% 19%<	QIC		21%	20%	25%	
Concrete ring	Q7			\$415	\$243	
Q12a Below ground structure Unlined pit 81% 81% - Concrete rings 0% 0% 0% Septic tank 19% 19% - Piped sewerage 0% 0% 0% Other 0% 0% 0% Don't know 0% 0% 0% Open hole-wooden slab 81% 81% - Open hole-concrete slab 0% 0% 0% - Open flush 19% 19% 19% - Pour flush 19% 19% - - Western toilet bowl 0% 0% 0% - Other 0ther 0% 0% 0% - Concrete/brick 19% 19% 19% - Fibrous cement 0% 0% 0% - Galvanized steel 5% 5% 5% - Wood 0% 0% 0% - Plastic sheet 0% 0% 0% - No walls<	Q12	Type of latrine structure (percentage out of all respondents that own a latrine)				
Unlined pit Sal's			57%			
Concrete rings 19% 19% 19% 2	Q12a	Below ground structure				
Septic tank 19% 19% - Piped sewerage 0% 0% - Other 0% 0% - Don't know 0% 0% - Q12b Slab structure - Open hole-wooden slab 81% 81% - Open hole-concrete slab 0% 0% - Open flush 19% 19% - Pour flush 19% 19% - Western toilet bowl 0% 0% 0% - Other 0m 0% 0% - Concrete/brick 19% 19% 1 Galvanized steel 5% 5% - Wood 0% 0% - Wood 0% 0% - Plastic sheet 0% 0% - No walls 0% 0% - Other 5% 5% - Other 5% 5%		Unlined pit	81%	81%	-	
Piped sewerage		Concrete rings	0%	0%	-	
Other Don't know Dom't kn		Septic tank	19%	19%	-	
Don't know 0% 0% 0% 0% 0% 0% 0% 0		Piped sewerage	0%	0%	-	
Q12b Slab structure Open hole-wooden slab 81% 81% - Open hole-concrete slab 0% 0% - Pour flush 19% 19% - Western toilet bowl 0% 0% - Other 0% 0% - Concrete/brick 19% 19% - Fibrous cement 0% 0% - Galvanized steel 5% 5% - Wood 0% 0% - Intach 67% 67% - Plastic sheet 0% 0% - Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Q12d Shelter roof structure Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -		Other	0%	0%	-	
Qpen hole-wooden slab 81% 81% - Open hole-concrete slab 0% 0% - Pour flush 19% 19% - Western toilet bowl 0% 0% 0% - Other 0% 0% 0% - Concrete/brick 19% 19% - Fibrous cement 0% 0% 0 - Galvanized steel 5% 5% - Wood 0% 0% - Thatch 67% 67% - Plastic sheet 0% 0% - Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Q12d Shelter roof structure - - Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -		Don't know	0%	0%	-	
Qpen hole-concrete slab 0% 0% - Pour flush 19% 19% - Western toilet bowl 0% 0% - Other 0% 0% 0% Other 0% 0% - Concrete/brick 19% 19% - Fibrous cement 0% 0% - Galvanized steel 5% 5% - Wood 0% 0% - Thatch 67% 67% - Plastic sheet 0% 0% - Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 0% 0% -	Q12b	Slab structure				
Pour flush 19%		Open hole-wooden slab	81%	81%	-	
Western toilet bowl Other 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0		Open hole-concrete slab	0%	0%	-	
Other 0% 0% 0 Q12c Shelter wall structure Toncrete/brick 19% 19% - Concrete/brick 19% 0% 0% - Fibrous cement 0% 0% - Galvanized steel 5% 5% - Wood 0% 0% 0% - Thatch 67% 67% - Plastic sheet 0% 0% - Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Q12d Shelter roof structure - - Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -		Pour flush	19%	19%	-	
Q12c Shelter wall structure Concrete/brick 19% 19% - Fibrous cement 0% 0% - Galvanized steel 5% 5% - Wood 0% 0% - Thatch 67% 67% - Plastic sheet 0% 0% - Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Q12d Shelter roof structure Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -			0%	0%	-	
Concrete/brick 19% 19% - Fibrous cement 0% 0% - Galvanized steel 5% 5% - Wood 0% 0% 0% - Thatch 67% 67% - Plastic sheet 0% 0% - Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Q12d Shelter roof structure - - Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -			0%	0%	-	
Fibrous cement 0% 0% - Galvanized steel 5% 5% 5% - Wood 0% 0% 0% - Thatch 67% 67% - Plastic sheet 0% 0% 0% - Salvaged material 5% 5% 5% - No walls 0% 0% 0% - Other 5% 5% 5% - Q12d Shelter roof structure Concrete 0% 0% 0% - Fibrous cement 0% 0% 0% - Galvanized steel 29% 29% -	Q12c					
Galvanized steel 5% 5% 5 5% - Wood 0% 0% 0% - Thatch 67% 67% - Plastic sheet 0% 0% 0% - Salvaged material 5% 5% 5 5% - No walls 0% 0% 0% - Other 5% 5% 5% - Other 5% 5% 5% - Q12d Shelter roof structure Concrete 0% 0% 0% - Fibrous cement 0% 0% 0% - Galvanized steel 29% 29% -		Concrete/brick	19%	19%	-	
Wood 0% 0% - Thatch 67% 67% - Plastic sheet 0% 0% - Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Q12d Shelter roof structure - - Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -		Fibrous cement	0%	0%	-	
Thatch 67% 67% - Plastic sheet 0% 0% 0% - Salvaged material 5% 5% - No walls 0% 0% 0% - Other 5% 5% 5- Q12d Shelter roof structure Concrete 0% 0% 0% - Fibrous cement 0% 0% 0% - Galvanized steel 29% 29% -			5%	5%	-	
Plastic sheet 0% 0% - Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Q12d Shelter roof structure - - Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -		Wood			-	
Salvaged material 5% 5% - No walls 0% 0% - Other 5% 5% - Q12d Shelter roof structure - - Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -			67%		-	
No walls Other Other 5% 5%			0%	0%	-	
Other 5% 5% - Q12d Shelter roof structure Concrete 0% 0% 0% - Fibrous cement 0% 0% 0% - Galvanized steel 29% 29% -		-	5%	5%	-	
Q12d Shelter roof structure Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -			0%	0%	-	
Concrete 0% 0% - Fibrous cement 0% 0% - Galvanized steel 29% 29% -			5%	5%	-	
Fibrous cement 0% 0% - Galvanized steel 29% 29% -	Q12d					
Galvanized steel 29% 29% -			0%		-	
25/6			0%	0%	-	
Tiles 0% 0% -			29%	29%	-	
					-	
Thatch 67% -					-	
Plastic steel 0% 0% -					-	
Salvaged material 0% 0% -		-			-	
No roof 5% 5% -					-	
Other 0% 0% -		Other	0%	0%	-	

No	Question	All	Latrine ownership	
		Special	Yes	No
Q13	Average distance to latrine (meters)	4.4	7.8	0.0
Q14	Defecation location (percentage out of all respondents)			
	Adults			
Q14a	At home			
	On the ground	46%	5%	100%
	In a water body	0%	0%	0%
	In your own latrine	57%	100%	-
	In a neighbour's latrine	0%	0%	0%
	In a public latrine	0%	0%	0%
04.11	Other	0%	0%	0%
Q14b	Away from home	e = -		
	On the ground	49%	38%	63%
	In a water body	0%	0%	0%
	In a public latrine	59%	71%	44%
	Other	0%	0%	0%
Q14c	Children At home			
₩ 14C		55%	18%	100%
	On the ground In a water body	55% 0%	18% 0%	100% 0%
	In a water body In your own latrine	0% 45%	0% 82%	0% -
	In a neighbour's latrine	45% 0%	82% 0%	- 0%
	In a public latrine In a public latrine	0%	0%	0% 0%
	other	0%	0%	0%
Q14d	Away from home	0 /0	U /U	U /U
-sci+U	On the ground	79%	76%	100%
	In a water body	79% 0%	76% 0%	100% 0%
	In a public latrine	0% 21%	0% 24%	0% 14%
	Other	21% 0%	24% 0%	0%
Q14f	Location for disposal of infant feces (percentage out of all respondents)	0 /0	U /U	J /U
	On the ground	0%	0%	0%
	In a water body	0%	0%	0%
	In your own latrine	0%	0%	0%
	In a neighbour's latrine	0%	0%	0%
	In a public latrine	0%	0%	0%
_	Other	0%	0%	0%
Q14g	Anal cleansing material (percentage out of all respondents)			
	Water	38%	67%	0%
	Leaves	65%	43%	94%
	Paper	19%	19%	19%
045	Other	0%	0%	0%
Q15	Larine advantages (percentage out of all respondents)	===:	7001	0001
	Improved hygiene/cleanliness	73%	76%	69%
	Improved health	51%	67%	31%
	More privacy	19%	24%	13%
	More comfortable	89%	90%	88%
	Convenience/save time Improved safety	11%	14%	6%
	Improved sarety Improved status/prestige	65%	76% 5%	50%
		3%	5% ov/	0%
	No advantages Don't know	0%	0%	0% 13%
	Don't know Other	5%	0%	13% 0%
016		0%	0%	0%
Q16	Larine disadvantages (percentage out of all respondents) Bad smell	220/	220/	6%
	Dag Sillell	22%	33%	0%

No	Question	All	Latrine o	wnership
L		Special	Yes	No
	Attracts flies	8%	10%	6%
	Cost to maintain it	0%	0%	0%
	Work to maintain it	3%	0%	6%
	Other people come to use it	0%	0%	0%
	Affects groundwater quality	0%	0%	0%
	No disadvantages	68%	67%	69%
	Don't know	5%	0%	13%
	Other	0%	0%	0%
Q17	Affordability perceptions (percentage out of all respondents)			
	At price \$100			
	Afford anytime	8%	10%	6%
	Afford at peak income	3%	5%	0%
	Afford after saving <2 months	0%	0%	0%
	Afford after saving >2 months	22%	19%	25%
	Never afford	68%	67%	69%
	At price \$80			
	Afford anytime	8%	10%	6%
	Afford at peak income	3%	5%	0%
	Afford after saving <2 months	0%	0%	0%
	Afford after saving >2 months	22%	19%	25%
	Never afford	68%	67%	69%
	At price \$60			
	Afford anytime	8%	10%	6%
	Afford at peak income	8%	14%	0%
	Afford after saving <2 months	3%	5%	0%
	Afford after saving >2 months	19%	14%	25%
	Never afford	62%	57%	69%
	At price \$40			
	Afford anytime	14%	14%	13%
	Afford at peak income	5%	10%	0%
	Afford after saving <2 months	16%	14%	19%
	Afford after saving >2 months	14%	24%	0%
	Never afford	51%	43%	63%
	At price \$20			
	Afford anytime	27%	29%	25%
	Afford at peak income	5%	10%	0%
	Afford after saving <2 months	22%	14%	31%
	Afford after saving >2 months	24%	38%	6%
	Never afford	22%	10%	38%
Q18	Average expected price for each pictured option (all respondents)			
	Latrine type A	\$9	\$10	\$7
	Latrine type B	\$18	\$22	\$13
	Latrine type C	\$65	\$91	\$31
Q19	Reason for purchase (percentage out of respondents that own a latrine)			
	Improved hygiene/cleanliness	67%	67%	-
	Improved health	62%	62%	-
	More privacy	38%	38%	-
	More comfortable	14%	14%	-
	Convenience/save time	33%	33%	-
	Improved safety	38%	38%	-
	Improved status/prestige	10%	10%	-
	Don't know	0%	0%	-
	Other	0%	0%	-

No	Question	All	Latrine o	wnership
		Special	Yes	No
Q20	Place of purchase (percentage out of respondents that own a latrine)			
	NGO	10%	10%	-
	Health Center	5%	5%	-
	Commune Council	5%	5%	-
	Village Development Committee	0%	0%	-
	Village Health Worker	5%	5%	-
	Local craftsman	5%	5%	-
	Local market dealers	24%	24%	-
	Other villagers	0%	0%	-
	Built it yourself	71%	71%	-
	Don't know	0%	0%	-
	Other	0%	0%	-
Q21	Average age of latrine (years)	1.3	1.3	-
Q22	Average amount paid for latrine in US\$	\$79	\$79	-
Q23	Decision maker (percentage out of all respondents that own a latrine)			
	Adult male in household	100%	100%	-
	Adult female in household	76%	76%	-
	Children in household	0%	0%	-
	Pesons outside of household	14%	14%	-
	Don't know	0%	0%	-
Q24	Purchaser (percentage out of all respondents that own a latrine)			
	Adult male in household	100%	100%	-
	Adult female in household	62%	62%	-
	Children in household	0%	0%	-
	Persons outside of household	0%	0%	-
	Don't know	0%	0%	-
Q25	Have thought about or discussed purchasing a latrine (percentage out of all			- 404
026	respondents that do not own a latrine)	81%	-	81%
Q26	Perceived purchase place (percentage out of all respondents that do not own a latrine)			
	NGO	6%	_	6%
	Health Center	0%	_	0%
	Commune Council	0%	_	0%
	Village Development Committee	0%	_	0%
	Village Health Worker	0%	_	0%
	Local craftsman	6%	_	6%
	Local market dealers	50%	-	50%
	Other villagers	0%	-	0%
	Built it yourself	0%	-	0%
	Don't know	19%	-	19%
	Other	31%	-	31%
Q27	Perceived decision maker (percentage out of all respondents that do not own a latrine)			
	Adult male in household	81%	-	81%
	Adult female in household	63%	-	63%
	Children in household	0%	-	0%
	Persons outside of household	0%	-	0%
	Don't know	13%	-	13%
Q28	Perceived purchaser (percentage out of all respondents that do not own a latrine)			
	Adult male in household	75%	-	75%
	Adult female in household	31%	-	31%
	Children in household	0%	-	0%
	Persons outside of household	0%	-	0%

No	Question	All	Latrine ownership	
		Special	Yes	No
	Don't know	13%	-	13%
Q29	Reason for not having latrine (percentage out of all respondents that do not own a latrine)			
	Too expensive/don't have enough money	88%	-	88%
	Have access to someone else's latrine already	0%	-	0%
	Satisfied with current practice/don't see a need	6%	-	6%
	Lack information on where to purchase a latrine	0%	-	0%
	Other priorities come first	0%	-	0%
	Don't know	13%	-	13%
	Other	0%	-	0%

Dash (-) signifies not applicable