Rural Consumer Sanitation Adoption Study:
Understanding Household Consumers in the Emerging Sanitation Market in Cambodia

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Study overview

The Rural Consumer Sanitation Adoption Study[1] (RCSAS) was conducted as part of WaterSHED's *Hands-Off* Sanitation Marketing program. Using a package of strategies aimed at stimulating demand and improving local supply of low-cost sanitation products, the *Hands-Off* Sanitation Marketing program is designed to catalyze a new sanitation market to accelerate uptake of improved sanitation in rural Cambodia. A key underlying concept of the program is to consider households as consumers rather than as beneficiaries of charity. The theory of change is that **affordable, desirable latrines** available from local enterprises, alongside **effective promotions** and **behavior change** efforts, with energetic support by **civic champions** within local government, would effectively stimulate rural household consumers to invest their own resources in durable, improved household latrines.

Objective

The RCSAS was designed to evaluate the WaterSHED *Hands-Off* Sanitation Marketing program and its impact on rural consumer demand for household latrines. The specific objectives of the study were:

1. To compare current household sanitation preferences and practices, levels of improved sanitation coverage, and barriers to adoption with the 2009 baseline household survey[2] results in the original project pilot area in Kampong Speu Province;
2. To evaluate current household sanitation preferences and practices, levels of coverage, and barriers to adoption in a program expansion area (Kampong Cham Province) after 18 months of activity, including tracking uptake of the new latrine technology introduced by the program; and
3. To analyze customer satisfaction and explore the impact of program strategies and activities on households' sanitation attitudes and investment behavior, as well as the effects of non-project external factors (e.g., hardware subsidies, CLTS triggering, village typology) on uptake behavior.

Methods

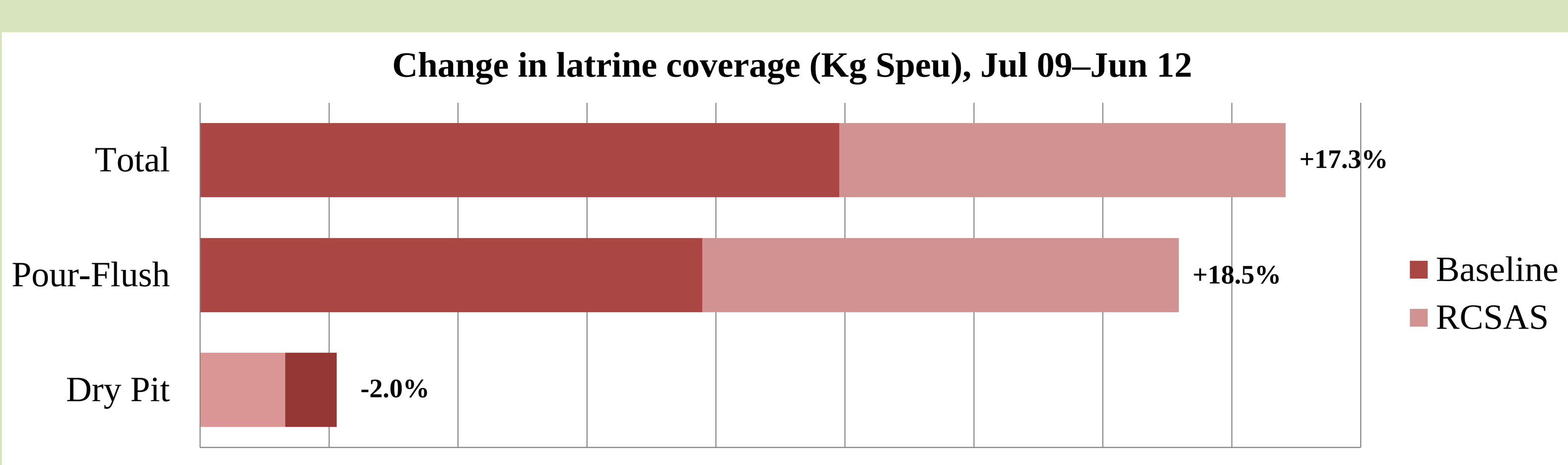
Within the sample villages, a household-level analysis was conducted among a choice-stratified random sample of latrine 'adopter' and 'non-adopter' households. The RCSAS defined latrine 'adopter' as a household that had purchased the new Latrine Core 'chamber box' technology introduced and promoted through the WaterSHED *Hands-Off* program. 'Non-adopters' were defined as those with no household latrine. A total of 695 household surveys were conducted, including 342 (49.2%) adopters and 353 (50.8%) non-adopters.

Study Area

The study involved a village-level investigation of sanitation conditions, as well as a household-level investigation of demand behavior, preferences, and practices in two provinces. In Kampong Speu, the study returned to 36 randomly selected villages from the 2009 baseline survey to measure changes at village and household level. In Kampong Cham, 33 sample villages were randomly selected from a stratified pool of villages recording ten or more latrine sales by WaterSHED-supported enterprises.

High-performing villages prove the potential for deep penetration

- 55% of all villages in Kampong Speu (20 of 36) increased coverage by 20% or more, including 8 villages that increased coverage by over 30%.
- Average change in coverage was the same for CLTS and non-CLTS villages in Kampong Speu.
- Evidence of upgrading in CLTS-exposed villages, but also reductions in coverage due to loss of dry pit latrines.



- 6% estimated increase in annual coverage over 3 years
- 5 times national average of 1% per year
- Marketing program began in Jun 2010 – sales data indicate most coverage gains occurred from Jun 2010 to Jun 2012 (2 years)

So far, the early adopters are the 'better-off'

National sanitation access by income quintile, CSES09[3]

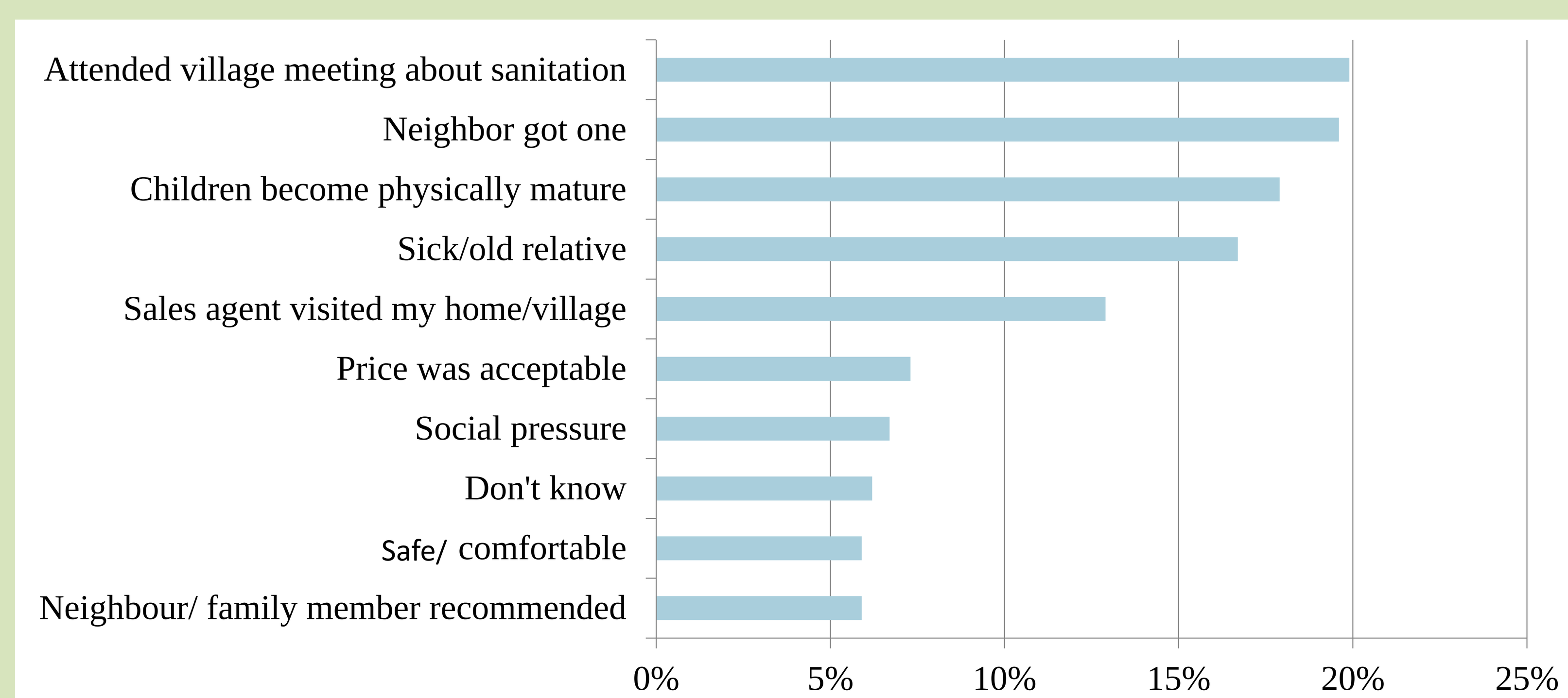
	Poorest	2	3	4	5
Improved	11%	15.5%	23.9%	33.8%	50.1%
Unimproved	4.7%	4.3%	4.4%	5.4%	4.7%
Open Defecation	84.3%	80.2%	71.7%	60.8%	45.2%

However, over 50% of rural Cambodian households without improved sanitation are NON-POOR.

Non-Adopters

Of the non-adopters, 77% want a flush/pour-flush latrine. This type of latrine is most preferred for comfort, ease of cleaning and no smell. 60% of non-adopters have seen or heard about the low cost latrine (52% Kampong Speu; 67% Kampong Cham). Most indicated that they heard about it from neighbors and family. Of these, 29% know an enterprise selling this new type of latrine and 35% know that it is possible to make a latrine purchase without leaving the village.

Drivers and influencers of purchase*



*Results expressed as percentage of adopter respondents

Adopters 'always' using latrine for defecation

	Wet Season	Dry Season
Adults	96%	97%
Children	84%	86%

In addition, 22% of non-adopters reported 'usually' using a neighbor's latrine for defecation

Reasons for purchasing from the enterprise*

*Results expressed as percentage of adopter respondents

Adopters are happy with their purchase

97% of adopters are satisfied or very satisfied with both products & services and 74% have recommended the product to their family and friends. Among adopters, 60% have purchased or would consider purchasing other products from the enterprise. Recommended improvements for enterprises include:

Adopters	Non-adopters
Faster delivery (31%)	Home delivery (61%)
Better product quality (23%)	Installment payments (29%)
Installation service (16%)	Installation service (11%)
Instalment payments (10%)	Acceptable price (11%)

Consumer exposure to sales opportunities are key

	Adopter	Non-Adopter
Has attended a village meeting where latrines are being sold	62%	41%
Has received home visit from sales agent to discuss buying a latrine	47%	26%
Has received home visit from official to discuss building a latrine	49%	37%
Has heard/seen messages from the government about the need for everyone to have a latrine	50%	49%

Unsafe handling of faeces when emptying pits is a concern

- This is the first latrine for over 90% of adopters and it has not yet required emptying.
- Of the 26 households that had emptied their latrine, 81% manually emptied and 70% applied contents directly to the field as fertilizer.
- 62% of those whose latrines are not yet full reported planning to manually empty. Of these, 70% plan to apply the pit contents directly to field as fertilizer.

Discussion

Of the many factors that contribute to sustainable growth in improved sanitation coverage and consistent use of latrines, recognizing and responding to rural households as discerning consumers appears to be central. Over 90 percent of purchases were made by households that had never before owned a latrine and dry pit latrine ownership decreased. With levels of ownership and consistent use growing rapidly, a greater focus can be turned to issues associated with the disposal of children's and infant's feces, management of pit waste and introduction of new WASH products and services. Key to future iterations will be to further engage local government as champions of change and to understand how the shift in social norms around open defecation might help to lower or remove the remaining barriers.

Conclusion

The RCSAS confirms a substantial increase in improved latrine coverage and an accelerated rate of improved latrine coverage in WaterSHED program areas. Household consumers are now able to access improved latrines more easily and more cheaply than before. New distribution and sales mechanisms are increasing household awareness of and exposure to more affordable latrine products and increasing motivation to invest in an improved latrine. Enterprises are demonstrating that they can profitably and sustainably serve at least some segments of the market. Nonetheless, challenges still remain to further support enterprises and the government to expand and improve their reach and ensure that latrine ownership results in sustained and safe sanitation and hygiene behaviors.

References

[1] Cambodian Rural Consumer Sanitation Adoption Study 2012 (forthcoming)

[2] WASH Marketing Project Kampong Speu Baseline Survey 2009:. http://www.watershedasia.org/research-and-technical-assistance/

[3] Cambodian Socio-Economic Survey 2009 http://www.nis.gov.kh/index.php/social-statistics/cses

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