

# Evaluation Report

## WaterSHED's *Hands-Off* Sanitation Marketing Program

### WaterSHED Cambodia



February 2016

FH Designs

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## About this Report

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## Acronyms

BCC	Behaviour Change Communication (approach to hygiene)
CC	Commune Council
CLTS	Community-Led Total Sanitation
CBO	Community Based Organisation
DRHC	Department of Rural Health Care
DORD	District Office of Rural Development
FGD	Focus Group Discussion
GSF	Global Sanitation Fund
IYCS	Infant and Young Child Sanitation
KII	Key Informant Interview
KP	Key Person (WaterSHED term for person who acts as sales agent/link with suppliers)
MDG	Millennium Development Goal
MFI	Microfinance Institution
Mol	Ministry of Interior
NGO	Non-Government Organisation
NSP	National Strategic Plan (for RWSSH 2014-2025)
OD	Open Defecation
ODF	Open Defecation Free
PDRD	Provincial Department of Rural Development
RCSAS	Rural Consumer Sanitation Adoption Study
RWSSH	Rural Water Supply, Sanitation and Hygiene
SP	WaterSHED term for sanitation enterprise/supplier
UNICEF	United Nations Children's Fund
WASH	Water Supply, Sanitation and Hygiene
WSP	Water and Sanitation Program of the World Bank
WTO	World Toilet Organisation

## Executive Summary

Water, Sanitation and Hygiene Enterprise Development (WaterSHED) has been working in the rural WASH sector in Cambodia since 2009 and is one of the premier sanitation marketing agencies. This report documents an evaluation of WaterSHED's *Hands-Off Sanitation Marketing Program* covering the period 2012-14. It was carried out in mid-2015 by FH Designs, with field work directed by Mr Peter Dwan.

The *Hands-Off* program operates in eight provinces to build sustainable sanitation businesses, linking them with household consumers and supporting government to oversee and support market processes. It worked in 54 districts, with 174 sanitation enterprises and resulted in sales of 79,660 toilets. On this basis, the program was highly successful, meeting its sales target and enabling an additional 376,000 rural Cambodians to access safe, durable, high-quality sanitation facilities.

**Evaluation purpose and methods.** The purpose of the evaluation was to assess the outcomes of the program across six dimensions: development impact, effectiveness and efficiency, sustainability, scalability, risks and capacity building. The methodology comprised review of secondary data, particularly quantitative information, combined with qualitative data collection in ten communities in six communes spread across two provinces. A highly participatory approach was employed that engaged stakeholders—particularly WaterSHED staff—in their own reflection and analysis.

**Overall assessment.** The evaluation affirmed that WaterSHED's *Hands-Off* sanitation marketing approach is a highly effective method for assisting rural people in Cambodia to access improved sanitation. Targets for sales and supplier numbers were achieved, delivering strong improvements in health and quality of life for consumers. The program has established considerable momentum and there are strong prospects for the development outcomes to be sustained.

### Issues for consumers

**Reaching the poorest households remains challenging for sanitation marketing.** If consumers choose a robust shelter, then latrines sold by WaterSHED-supported businesses remain expensive for rural households—costing more than \$300. This inhibits uptake by the poorest households. Measures to offer payment by instalment and micro-finance loans do not appear to have overcome this barrier for the poorest households. WaterSHED has undertaken some limited experimentation with subsidies and is in a position to play a guiding role in the sector for developing subsidy mechanisms that do not undermine market-based approaches.

**Engagement with MFIs needs to be streamlined and loans offered consistently across the program.** WaterSHED has worked effectively with VisionFund in Battambang where micro-finance officers promote latrine sales as part of their lending activities. Generally however, MFIs are not yet convinced that sanitation is a good fit for their loan products or a priority area for expansion. Experience during the Expansion Phase suggests that the very poorest households will not take out loans for sanitation and hence MFIs cannot be relied upon to achieve access for poor households.

**Delayed installation is a non-issue.** The Rural Consumer Sanitation Adoption Study commissioned by WaterSHED found that most latrines are installed within 18 months. WaterSHED has encouraged suppliers to offer an installation service and included this as one of their targets for the Extension Phase but consumer take-up has been low. The evaluation suggests that the barrier for installation is meeting the cost of the superstructure rather than securing the services of an installation contractor.

**The *Hands-Off* program is essentially about securing access to sanitation not hygiene behaviour change.** The delivery structure of the *Hands-Off* approach is directed to sales rather than hygiene

behaviour change. This is a strength, not a weakness. Other elements of WaterSHED's broader program address hygiene behaviour change, including disposal of infants' and babies' faeces. WaterSHED could strengthen partnerships with agencies that specialise in behaviour change to complement their market-driven approach.

**Proactive planning is required for pits that are filling fast.** Consumers are not aware of the health dangers in emptying their pit contents directly onto agricultural areas. This is a serious risk for consumers and also a reputational risk for WaterSHED, requiring a conscious response. This could include providing advice on safe pit emptying in latrine product brochures; training Facilitation Specialists and Sales Agents; and encouraging suppliers to sell rings for construction of double pits.

Issues concerning suppliers

**Market saturation for the core product is a desired endpoint and sales for successful suppliers are likely to fall considerably over time.** Suppliers are satisfied that involvement in the *Hands-Off* program is building their business generally and deepening their relationships with customers. In areas where sanitation coverage approaches 100% the long-term prospect for most suppliers is selling a much lower volume of latrines.

**Consideration should be given to extending support to suppliers not currently supported by WaterSHED.** Whereas the *Hands-Off* program was designed in an initial context of few or no businesses selling toilets to rural consumers, copy-cat firms are now springing up around WaterSHED's success. WaterSHED could extend support more broadly to more/all suppliers in districts where it works; and be clearer about when suppliers will 'graduate'. WaterSHED could also look to treat their technology improvements as 'open source', encouraging all suppliers to adopt the WaterSHED core package if they wish.

**More attention needs to be paid to building the capacity of sales agents.** Key Persons (WaterSHED's term for sales agents) have received training from WaterSHED but many do not feel confident to manage sales events or conduct door-to-door marketing. WaterSHED should develop a training guide for FSs to use, and consider an associated guide for Key Persons.

Enabling environment

**The Civic Champions leadership program is making a significant contribution to government capacity at commune level.** This program has had a very positive effect on both the confidence and skill levels of participating commune councillors. Where it has been piloted there has been an increased focus on rural sanitation and a significant increase in latrine sales. Its rollout to the eight *Hands-Off* provinces is likely to further advance sub-national government's effectiveness. If expansion is possible, greater district-level government participation should be encouraged, since they are least engaged with respect to sanitation.

**Articulating an aspiration and strategy for scaling up is important.** The Cambodian Government is focused on achieving open defecation free communities, which is not a strength of the market-based approach. Nevertheless, many agencies recognise the importance of sanitation marketing and would like to learn from or partner with WaterSHED. There is great scope for the *Hands-Off* approach to be the premier sanitation marketing method and for WaterSHED to partner purposefully with a range of agencies. WaterSHED should document the *Hands-Off* model to make sharing with others easier.

**The *Hands-Off* approach may not be well-suited to some challenging environments in Cambodia.** Remote locations with poor markets and dispersed populations present a challenge to the *Hands-Off* approach, as do areas subject to frequent flooding or high water tables. WaterSHED legitimately

avoids these areas but may also choose further product innovation and development to address the specific needs of these challenging environments.

WaterSHED, organisation and operation

**The absence of a current reference document for the organisation reflects an opportunity for WaterSHED to develop a program strategy and an annual, rolling 3-5 year business plan.** These would help to give effect to the WaterSHED vision and mission statements and help WaterSHED articulate a response to a range of important strategic questions. The business plan would ensure the program aligns with the organisation's priorities, provide a framework against which to manage implementation and help staff understand how their work contributes to broader goals.

**WaterSHED should ensure the *Hands-Off* approach is less 'hands-on'.** WaterSHED staff are playing a much more active role than envisaged. In particular, most sales events and door-to-door sales are being conducted by Facilitation Specialists with non-staff playing supporting roles. There are also insufficient indications that suppliers will take over management of the sales agents when WaterSHED withdraws its support. WaterSHED revised its program performance indicators to track the percentage of sales being generated independently by partners and not its own staff. Currently, 60% of sales occur independently, and WaterSHED is targeting to reach 70% by 2017. WaterSHED could further address this concern with a three-part strategy during the Consolidation Phase: (i) withdraw from several districts, across several provinces, in a conscious trial of an exit strategy; (ii) intensely manage a 'pure' *Hands-Off* approach in several districts in each province, that demonstrates how the approach should work when managed as intended; and (iii) steadily move all other districts to the envisaged *Hands-Off* approach by improving staff training and management, using the 'pure' districts as demonstration sites.

**Human resource management within WaterSHED could be strengthened** to address the high frequency of staff turnover. In addition to a broad HR review, attention should be given to the financial incentives paid to facilitation staff (which have a strong sales target basis and hence create a perverse incentive to directly implement); and better written documentation to guide staff training and orientation.

# 1 Introduction

Water, Sanitation and Hygiene Enterprise Development (WaterSHED) has been working in the rural WASH sector in Cambodia since 2009 and is one of the premier sanitation marketing agencies. This report documents an evaluation of WaterSHED's *Hands-Off Sanitation Marketing Program* covering the period 2012-14. It was carried out in mid-2015 by Mr Peter Dwan and Dr Matthew Bond of FH Designs.

The report provides an introduction to sanitation in Cambodia, and then describes the WaterSHED *Hands-Off* program and the evaluation methodology. The evaluation was structured around six pillars. Findings and discussion for each pillar are set out in Sections 3 to 8. A synthesis of the conclusions from the evaluation is provided in the final section, along with a set of recommendations for consideration by WaterSHED.

Whilst WaterSHED staff were closely involved throughout the evaluation, responsibility for the views presented and any errors, omissions or inaccuracy rests with the authors, FH Designs.

## 1.1 Sanitation in Cambodia

Cambodia is a nation of approximately 15 million people in South East Asia, comprising 25 provinces, 185 districts and 1,600 communes.<sup>1</sup> According to UNDP, Cambodia is amongst the world's poorest countries, ranked 136 out of 187 on the human development index, with 19% of the population earning an income of less than \$1.25 per day.<sup>2</sup> Approximately 80% of its people live in villages in rural areas, where the rate of access to improved water supply is 44% and only 30% to improved sanitation. The urban coverage is much higher with approximately 100% having access to improved water and 88% to improved sanitation.<sup>3</sup> As a consequence of poor access to services, many Cambodian people in rural areas suffer from water and sanitation (WASH) related diseases—especially diarrhoea in children under 5 years of age—as well as economic losses and a lack of human dignity.<sup>4</sup>

WaterSHED (the Water, Sanitation and Hygiene Enterprise Development) has been working in the rural WASH sector in Cambodia since 2009, initially as a regional program led by the University of North Carolina with funding from USAID. It has since registered as a local NGO in Cambodia and currently has funding support from a number of donors including the Stone Family Foundation.

WaterSHED's vision is '*...that everyone is enabled to adopt appropriate water, sanitation and hygiene related behaviours*' and its mission states that '*WaterSHED engages with local enterprises and government in the development of sustainable market-based approaches that empower households to be active and informed consumers of water, sanitation and hygiene products and services.*'

To achieve this vision, WaterSHED provides business development services to local enterprises and conducts research related to WASH behaviours, products and services. It emphasises the importance

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<sup>1</sup> Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia*

<sup>2</sup> UNDP(2014) *Human Development Report*

<sup>3</sup> WHO/UNICEF. (2015). *Estimates of the Use of Improved Sanitation Facilities, Joint Monitoring Programme for Water Supply and Sanitation*

<sup>4</sup> Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia* and Hutton (2012) *Economic Assessment of Sanitation Interventions in Cambodia*

of supporting government leadership in the WASH sector, to build sustainability and help to achieve the overall aim of improving the health and livelihoods of rural people.<sup>5</sup>

WaterSHED works in Cambodia and Vietnam and in a number of other WASH areas (e.g. water filters for access to safe water and hand washing stations to promote hygiene). This evaluation is focused on WaterSHED's *Hands-Off* sanitation marketing program in Cambodia. WaterSHED characterises its initial years in Cambodia (2009-11) as its Pilot Phase, the following period from 2012 to 2014 as its Expansion Phase, and 2015-17 as its Consolidation Phase. This evaluation assesses the three year Expansion Phase.

While the current rural sanitation coverage of 30% for rural Cambodia is still very low, when compared with the 2005 estimate of 17% it is clear that some advances have been made over the past ten years. In 2006, Community Led Total Sanitation (CLTS) was trialled in Cambodia. Prior to this, as in many developing countries, 'supply-led' approaches with significant hardware subsidies were dominant. These have been shown to produce very slow uptake and resulted in many latrines not being installed and used. CLTS is a demand-led process that concentrates on bringing out latent demand for sanitation. In the Cambodian context it resulted in a patchy uptake and often a high level of reversion to open defecation. Many of the latrines (mainly dry pit latrines made from local materials) failed to meet people's desires for a durable, high-quality latrine which in Cambodia equates to a pour-flush latrine with an offset pit.

WaterSHED's *Hands-Off* approach uses the principles of sanitation marketing, which is also a demand-led methodology but is based on market principles of supply and demand. Early trialling in Cambodia of sanitation marketing was undertaken in the period 2008-10 by a number of agencies including WaterSHED, iDE, Lien Aid and World Toilet Organisation, with assistance from WSP and USAID in particular. Marketing strategies were based on extensive, in-depth consumer research to ascertain what rural households in Cambodia thought about sanitation, what sort of latrine they preferred and what price they were prepared to pay. The research showed that key motivators were convenience, comfort, privacy and security, while barriers were the bad smell of dry pit latrines, as well as the perception of the high cost of pour flush latrines and the accessibility of latrine products and services.<sup>6</sup> This formative consumer research was then followed up with an examination of current and potential sanitation product and service providers, to determine the current supply interest and capability. At the same time, considerable product research and development was undertaken culminating in some low-cost pour-flush latrine models being engineered and brought to market. A low-cost pour-flush latrine was developed and has dominated the market, promoted by IDE as the 'Easy Latrine' and by WaterSHED known as the 'Low-cost Latrine' package. The latrine has a price point of \$45-50.

WaterSHED and iDE have become established as the main sanitation marketing agencies in Cambodia, with each documenting latrine sales exceeding 100,000 units. In addition to supporting local sanitation enterprises in the production and sales of latrines, both WaterSHED and iDE have also supported the development and implementation of promotional and behaviour change tools and activities to encourage people to buy and use latrines thereby ending household open defecation and improving their WASH-related hygiene practices. WaterSHED in conjunction with

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<sup>5</sup> WaterSHED website [www.watershedasia.org](http://www.watershedasia.org)

<sup>6</sup> Jenkins.M (Sep 2010) *Cambodia Sanitation Consumer Demand and Behavior Qualitative Study*

government and others in the sector developed the ‘Stop the Diarrhoea’ campaign and iDE the ‘Have a latrine, have a good life’ campaign.

The Ministry of Rural Development (MRD) has primary responsibility for rural sanitation and has adopted demand-led approaches, such as CLTS and sanitation marketing (highlighting the important role of the private sector) in its National Strategic Plan for Rural Water Supply, Sanitation and Hygiene 2014-2025.<sup>7</sup> MRD leads the rural water and sanitation sector in Cambodia and holds monthly sector coordination meetings with approximately 70 NGOs and multilateral agencies working in the sector. MRD’s Department of Rural Health Care (DRHC) has specific responsibility for rural sanitation and hygiene in Cambodia.

While the Millennium Development Goal target for sanitation (combining urban and rural coverage) was 48.5%, the Cambodian government set their own Cambodian MDGs. For rural sanitation this target was 30% by 2015, which in fact has been achieved. The latest JMP estimates indicate that while the MDG goal was 48.5%, by 2015 an overall coverage of 42% had been achieved and Cambodia has been described by JMP as making ‘good progress’.<sup>8</sup> While the recent progress in rural sanitation can be seen as positive and encouraging, it needs to be viewed in the context of approximately 60% of people living in the rural areas still practising open defecation. This represents a continued health challenge and significant risk from a WASH-related diseases perspective.

The National Strategic Plan (NSP) acknowledges the need to change people’s WASH-related hygiene behaviours. The NSP declares that universal sanitation coverage is to be achieved by 2025.<sup>9</sup>

## 1.2 WaterSHED’s *Hands-Off* approach

***“The Hands-Off approach to sanitation marketing focusses on building sustainable businesses. This means catalysing a market: supporting business to get started, and then getting out of the way”***<sup>10</sup>

The WaterSHED *Hands-Off* approach uses the central components of sanitation marketing as described above, namely formative consumer research to find out what people want and how much they are prepared to pay for it, followed by product development to meet these needs and supply-side strengthening to link consumers with suppliers. The market is central and underpins sustainability. WaterSHED further describes its *Hands-Off* approach as focusing on building sustainable businesses, encouraging competition and, importantly, supporting the role of government to lead behaviour change promotion, support local businesses, monitor progress and set policy direction. The *Hands-Off* aspect emphasises that WaterSHED’s role is to catalyse, provide training, mentoring and support rather than ‘doing’.

The essential elements of the *Hands-Off* approach are an affordable and desirable latrine, promotional and marketing activities undertaken by sales agents in each community who link consumers to suppliers that are able to fabricate and deliver the latrine products while making a reasonable profit. The *Hands-Off* approach also includes supporting government to set policies and support sanitation improvements but the primary elements are market-based solutions involving informed consumers and private sector latrine providers.

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<sup>7</sup> Royal Government of Cambodia (2014) National Strategic Plan RWSSH 2014-205

<sup>8</sup> WHO/UNICEF. (2015). *Estimates of the Use of Improved Sanitation Facilities, Joint Monitoring Programme for Water Supply and Sanitation*

<sup>9</sup> Royal Government of Cambodia (2014) *National Strategy Plan for RWSSH 2014-2025*

<sup>10</sup> WaterSHED website <http://www.watershedasia.org/what-is-sanitation-marketing/>

One key to selling latrines to rural households in Cambodia was offering a toilet package that was desirable but also affordable. WaterSHED invested in research and development in partnership with other agencies to create a 'core' latrine package that consists of the following components:<sup>11</sup>

- A ceramic pour-flush latrine pan, with water seal, set in a tiled concrete pad
- A specially designed pre-cast concrete chamber box which sits under the latrine pan
- A PVC pipe which connects to the chamber box and allows the pit to be offset
- An offset pit lined with pre-cast concrete rings (three rings are included in the standard model) made from a special thin mould, plus a concrete lid to seal off the top of the pit and a small PVC vent pipe.

Providing these components as a package was an important innovation, which addressed the constraints faced by rural households. Previously latrine pans, concrete slabs and tiles needed to be purchased separately. The core latrine package meant that all the necessary latrine components could be purchased from the one supplier and delivered onsite at the same time. In addition, the chamber box is designed to avoid the need for a mason to fabricate a collection box out of bricks during installation. The concrete ring design was formulated to bring the overall price of the core package down to meet consumers' willingness and ability to pay but without compromising the strength required to effectively line the pit. No superstructure or shelter is provided with the core package. Households are free to construct whatever shelter they prefer and can afford.

The *Hands-Off* approach involves identifying and providing support to existing businesses which were either already supplying very few latrines (typically one to two per month) or were prepared to include latrines as part of their business activities. These enterprises are termed suppliers (SPs) by WaterSHED. Suppliers are given training in how to fabricate the elements of the core package and general business training, but are expected to make their own investments in materials and moulds.

To help suppliers generate sales, WaterSHED developed standard marketing and promotional materials and activities. These are used to promote sanitation behaviour change and stimulate action in communities, as well as explain the elements of the core package and how households can purchase latrines on the spot. The toolkit was made open-source by WaterSHED so that it could be used by other agencies in the sector. It is now actively used by at least 27 other organisations. Typically, promotion activities include 'sales events' during which the advantages of owning and using a latrine are explained and the components of the core package are displayed for people to examine. The sales event format includes behaviour change elements developed through social marketing research and piloting supported by WaterSHED, especially during 2010.<sup>12</sup> Key behaviours highlighted include using a latrine for defecation and hand washing with soap, especially after defecation and before handling food. Drivers include disgust about open defecation and disposal of human faeces in the environment leading to people ingesting small amounts of faeces, as well as comparing open defecation with the behaviour of dogs. After the behaviour change aspects are outlined the components of the core package are displayed for people to examine. Payments and arrangements for deliveries are also discussed during these events and orders and deposits taken. WaterSHED frontline staff (known as Facilitation Specialists, FSs) support at least one person in each

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<sup>11</sup> See core latrine brochure in Annex D

<sup>12</sup> WaterSHED, 17 Triggers and Lien Aid. (Aug 2010) *Social Marketing Mini Pilot Test Report*; also WaterSHED, 17 Triggers and Lien Aid (2010) *Three Year Social Marketing Plan*.

village for training on how to run sales events, make door-to-door sales and connect purchasers with suppliers. During the Expansion Phase these local sales agents were usually village chiefs or deputy chiefs and described by WaterSHED as Key Persons (KPs).

In addition to undertaking marketing the KPs provide the link between consumers and suppliers once an order is placed and facilitate payments and deliveries of the latrine packages. WaterSHED facilitates suppliers to establish contracts with KPs. Suppliers set their own commission and on average pay \$2.50 to KPs for every latrine sold.

### 1.3 Purpose and scope of the evaluation

The purpose, scope, objectives and deliverables of the evaluation as set out in the evaluation Scope of Work (Annex A) are as follows:

It describes the primary purpose of the evaluation as to:

*Measure the outcomes of the expansion phase of WaterSHED's Hands-Off sanitation marketing program that can be attributed to program activities directly, or indirectly via WaterSHED's boundary partners.*

#### Objectives and evaluation questions

The evaluation framework developed by WaterSHED is divided amongst six pillars—development impact, effectiveness and efficiency, sustainability, and scalability; and also risks and capacity building. These pillars are to be considered at multiple levels covering: households, WASH enterprises and the institutional and enabling environment.

The evaluation questions for each pillar were articulated in the Scope of Work. The questions have been adapted slightly by the Evaluation Team (for clarity and to avoid overlap) as follows:

#### **Development impact:**

What key development challenges are addressed?

What features of the solution are different?

What hampers the impact?

To what extent did project meet its targets (Who and how many were impacted directly/indirectly)?

Were there any unintended consequences?

#### **Effectiveness and efficiency:**

Activities that positively or negatively affected the outcomes.

How does the *Hands-Off* approach fit strategically in the WASH landscape; are there competing solutions that are more effective, sustainable, or cost-effective?

Describe the cost-effectiveness in terms of cost per development outcome (relative to alternative approaches)?

Are there synergies with existing private sector/NGO/public sector programs that should be captured?

#### **Sustainability:**

What is the plausibility that the intended benefits of the activities and their impacts are sustainable?

To what extent is the local/national government a partner to this program?

Do the local community and /or the local /national government have a long-range sustainability plan for this program?

What are the views of the target community about sustaining the achievements beyond the close of the program?

What are the opportunities to further strengthen sustainability of the funded program services?

**Scalability:**

What is the possible magnitude of impact in Cambodia and elsewhere?

What scale could this approach reach in the long-term?

What are the essential partnerships necessary to reach it?

What are the recommended avenues for scale up over the next three years?

**Risks:**

What major program risks should be addressed by management?

**Capacity Building:**

To what extent was the capacity of key stakeholders enhanced: private sector, government (national and sub national), other partners within WaterSHED (staff, management and governance)?

## 2 Evaluation Methodology

The evaluation used a participatory, mixed-methods approach. FH Designs developed the evaluation approach in close consultation with Janita Bartell (WaterSHED's Social Behaviour and Research Specialist). The evaluation was managed by the Lead Consultant from FH Designs, Peter Dwan, in collaboration with Dr Matthew Bond. A detailed evaluation plan, including the schedule of activities and evaluative tools, is attached as Annex B.

### 2.1 Approach

#### Principles

The following principles guided the evaluation:

- (i) Model participatory, inclusive practices throughout.
- (ii) Ensure that processes, wherever possible, create useful learning opportunities for informants.
- (iii) Reflect a high-level (impact) focus that seeks to understand success and what was critical to achieving that success.
- (iv) Draw upon WaterSHED's own understanding of the program's strengths and weaknesses; particularly with respect to lessons learned.

#### Approach

Through a number of evaluations and reviews, WaterSHED has collected a considerable amount of quantitative data. Several of the key investigations have been carried out by third parties, notably the Rural Consumer Sanitation Adoption Study (RCSAS), microfinance (MFI) studies, Infant and Young Children's Sanitation (IYCS) study and several reports by the Water and Sanitation Program of the World Bank (WSP). More recently, WaterSHED in partnership with the Cambodian government, conducted a census of all households in all village targeted by the *Hands – Off* program.<sup>13</sup> FH Designs believes that this material constitutes adequate quantitative data to describe the impact and scope of the program and subsequently agreed with WaterSHED that no additional quantitative surveying was required ahead of the in-country activities.

Qualitative information was the principal form of data collected for the evaluation. Whereas a mixed methods approach had been envisaged, involving a combination of quantitative and qualitative processes, the extent of quantitative data already collected for the program (as noted above) made it appropriate to focus evaluation resources on reflection with stakeholders. In effect, consumers and boundary partners were invited to consider the evaluation questions and respond to them directly. The challenge in this approach was extrapolating to the wider program findings from a small sample of qualitative engagements. The WaterSHED Core Team was assigned that task and brought the requisite contextual knowledge to make that process effective.

#### Evaluation Team

As the evaluation has a strong learning focus, WaterSHED staff were closely involved throughout. An evaluation 'core team' was formed consisting of five members who participated in the initial reflection meeting, the field work (in both provinces) and the synthesis/feedback workshop held in Phnom Penh after all field work had been completed. WaterSHED members of the core team comprised the Social Behaviour and Research Specialist, the Business Intelligence Unit Head and two field staff. The field staff, one female and one male, were drawn from the pool of Area Managers and

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<sup>13</sup> WaterSHED(2015) *A Survey on Basic Water and Sanitation facilities in Eight Target Provinces of WaterSHED in Cambodia*

Senior Facilitation Specialists. This core team was supplemented by a number of additional key WaterSHED staff who participated in one of the two provincial visits. Details of the evaluation team members are set out in the Evaluation Plan in Annex B. These supplementary team members helped ensure good gender balance representation from almost all target provinces. They also took a lead role in organising meetings, collecting data at the community level and with suppliers. The evaluation process was managed by Mr Peter Dwan, of FH Designs.

## 2.2 Evaluation methods

The Evaluation Plan is set out in detail in Annex B. An overview of the principal processes is provided below.

### Review of secondary data

The Lead Consultant reviewed an extensive list of secondary data consisting of internal project documentation, third party reports on WaterSHED's activities and assessments of the sanitation sector in Cambodia, which have been included in the list of references. The overall scope of the program was described in the original project proposal, '*Hands-Off* Sanitation Marketing: A Toilet Revolution', submitted to the Stone Family Foundation covering the period 2012-14. This document contained the main outcome targets for the evaluation. Six monthly, annual and end of project reports submitted by WaterSHED to the Stone Family Foundation provided an assessment of progress and outcomes against the targets, from WaterSHED's perspective. The Rural Consumer Sanitation Adoption Study (RCSAS) referred to throughout this report, provided extensive quantitative and qualitative analysis of the program's achievements and reach at the consumer level up to November 2012. The review of secondary data provided the underpinning for the evaluation's preliminary findings that were tested during in-country activities.

### Inception and reflection workshop in Phnom Penh

At the commencement of the in-country phase of the evaluation, an Inception/Reflection workshop was held with key WaterSHED staff. Its purpose was for the Lead Consultant to present and analyse findings from the desk review process with WaterSHED staff; and to confirm the purpose, objectives and methodology. The workshop was concluded with detailed planning with the Core Evaluation Team ahead of the two province visits, including finalising the draft evaluation tools.

### Provincial visits

Consultations were held with consumers, suppliers and commune government in two provinces (communities are listed in Section 2.3). The processes were common in each province and held over three days. The Evaluation Team was divided into three sub-groups and visited three communes simultaneously on each day. The field consultations consisted of:

Day 1. Commune FGDs/KIIs and Supplier KIIs. Interviews with commune leaders responsible for WASH. Interviews by each sub team of WaterSHED-supported sanitation enterprises/suppliers operating in or serving the target commune to discuss their experiences, especially profitability and long term plans.

Day 2: Community visits. Each of three sub-teams visited one community each and undertook three separate activities: KIIs with community leaders and sales agents; FGD with 8-12 community members, organised by the village chief or the KP and where possible including a balance of women and men, adopters and non-adopters and a range of wealth classifications; and a short transect walk to visit approximately ten households where sanitation was discussed and latrines inspected.

Day 3: Community visits and stakeholder meetings. Two sub-teams visited a further two communities and conducted the same activities as outlined above. The other team, including the Lead Consultant, conducted KIIs with provincial and district government authorities responsible for rural sanitation and, where possible, with other agencies active in sanitation in the province, such as INGOs and MFIs.

Debrief. At the end of each day, sub-teams regrouped to debrief, share findings and compare results from their commune/community consultations. Brief notes summarising the findings, emerging issues and lessons were prepared on a daily basis. At the end of each provincial visit a synthesis discussion was held with all member of each provincial evaluation team.

Guidelines for the various key informant interviews and focus group discussions are provided in Annex B. These were refined and finalised during the initial reflection workshop.



FIGURE 1 COMMUNITY FOCUS GROUP DISCUSSIONS

#### Synthesis Workshop in Phnom Penh

At the conclusion of the provincial visits a Synthesis Workshop was held with the Evaluation Core Team and senior WaterSHED staff. Participants were facilitated to draw together their findings from the provincial visits and consolidate their preliminary findings against the evaluation questions. This ensured that the Lead Consultant gained a clear understanding of the combined thinking of the evaluation team and senior WaterSHED staff before drafting the evaluation findings. Due to the availability of key WaterSHED staff the Synthesis Workshop was held before the Lead Consultant met with national stakeholders from government, multilaterals and NGO boundary partners (see below).

#### Key Stakeholder Interviews in Phnom Penh

The Lead Consultant met with key national government, multilateral and NGO agencies active in the rural sanitation sector in Cambodia. These meetings were used to gain an up-to-date understanding of the sector; to seek views on the influence that WaterSHED has had on the sector; and understand the potential and risks for sustainability and scaling of the WaterSHED program. The Lead Consultant also attended a monthly meeting of the Rural Water Supply and Sanitation Sectoral Working Group. Key people met included representatives from the Ministry of Rural Development, including the Department of Rural Health Care, Ministry of Interior, UNICEF, WSP, GSF/Plan, SNV, IDE, WaterAid and VisionFund (see Annex C).

### 2.3 Field visit sites

Province selection offered two principal choices—select provinces targeted in previous studies to increase the availability of baseline/progress data and facilitate comparison with the end line evaluation; or select different provinces and compare findings there with those based on past studies in other provinces. Initial consideration was given to Battambang and Kampong Chhnang.

Battambang was one of the new provinces included in the 2012 expansion phase and according to the most recent progress report had not met its sales targets.<sup>14</sup> Kampong Chhnang was one of the newest provinces added to the program and progress reports suggested it had exceeded its sales target. Following discussion with WaterSHED, Kampong Chhnang was eliminated from consideration. Recent staffing changes had left the program there without an Area Manager for most of 2015, making it difficult to plan and facilitate an evaluation visit. As an alternative, Kampong Speu was selected. Baseline information from 2011 and coverage data in 2014 are available for this province, which can be accessed within a half day travel from Phnom Penh. In addition Kampong Speu offered an opportunity to include a commune that was part of the Civic Champions Leadership program, as well as a village where WaterSHED had trialled a partial hardware subsidy.

Within each province, the Evaluation Plan proposed the following selection criteria be applied to identify districts, communes and communities for the evaluation consultations.

Districts—one per province; part of the Expansion Phase activities; catering for the diversity of commune characteristics presented below.

Communes and communities—three different communes in each district that provide:

- Highest ratio of IDPoor households. Select two communities; lowest and highest rate of IDPoor adopters
- Highest rates of sanitation coverage, including at least one 100% coverage community. Select one high coverage community and at least one low coverage community.
- Microfinance loans were offered. Community with the highest and lowest uptake of MFI loans.

Where opportunities exist to visit communities that exhibit any of the following features, these communities be given preference:

- Examples of where ID1 and 2 poor households received WaterSHED-sponsored sanitation vouchers
- Competent delivery of CLTS in a manner complementary to WaterSHED activities and, ideally, where ODF has been declared/verified
- High rates of subsidised hardware present from other agencies

The two districts chosen were Sangkae, in Battambang province, and Kong Pisey in Kampong Speu. These districts provided higher coverage villages as well as some lower and more remote communities, but were also reasonably accessible to the team given the limits time available for the field work. Sangkae district had a sanitation coverage of 56% in 2014 compared with a 2011 rate of 41%, indicating strong performance during the expansion phase. Its coverage is close to the 53% average rate for Battambang province. Kong Pisey district had a coverage of 36% in 2014 compared

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<sup>14</sup> WaterSHED, (2012-14) *Stone Family Foundation project proposal, 6 monthly, annual & final reports (period Jan 2012 – Dec 2014)*

to 27% in 2011, showing a more modest improvement over the past 4 years. Again, district coverage was approximately representative of the provincial average of 32% for Kampong Speu.

Communes and villages were selected in accordance with the criteria noted above and are listed in Table 1. Particular aspects of individual villages are noted in the 'comments' column. The villages chosen in both districts represented a good mixture of high, medium and low coverage communities according to the WaterSHED's coverage data. In addition, some commune councillors from Rokakaoh and Preah Vihear communes had participated in the Civic Leadership program supported by WaterSHED and some households in Prey Pngor village had received a voucher as part of WaterSHED's subsidy trial.

TABLE 1 COMMUNES AND VILLAGES VISITED

Commune	Village	Households	Comments
<b>Battambang Province, Sangkae District</b>			
Anlong Vil	Svay Kang	766	Less remote, estimated coverage – 100%
Reang Kerei	Voat Kandal	260	More remote, estimated coverage – 67% coverage
	Prey Svay	177	More remote, estimated coverage – 28% coverage
Ta Pon	Samdach	626	Estimated coverage – 63% coverage
	Svay Sa	922	Estimated coverage – 28% coverage
<b>Kampong Speu Province, Kong Pisey District</b>			
Rokakaoh	Prey Pngor	212	Least remote, estimated coverage – >80% voucher subsidy
Preah Vihear	Boeng Changriek	79	More remote, estimated coverage – 19%
	Boeng Roneal	182	More remote, estimated coverage – 34%
Tuek Lak	Boeng Ngoung	165	Estimated coverage – 28%
	Snuol Chrum	130	Estimated coverage – 54%

### Schedule of in-country activities

The field work in Cambodia was held over a three week period commencing in late August.

TABLE 2 SCHEDULE OF IN-COUNTRY ACTIVITIES

Date	Activities	Participants	Location
17/8	Initial briefing (am) and Reflection workshop (pm)	Core Team & senior WaterSHED staff	Phnom Penh
18/8	Planning workshop	Core Team	Phnom Penh
19-21/8	Visit to Province 1- Battambang Consultations with province, district and 3 commune governments; 3 suppliers and 5 communities	Core Team + Province 1 Field Team	Battambang Province
22-23/8	Documentation	Consultant	Phnom Penh

24-26/8	Visit to Province 2- Kampong Speu Consultations with province, district and 3 commune governments; 3 suppliers and 5 communities	Core Team + Province 2 Field Team	Kampong Speu Province
27/8	Documentation	Core Team	Phnom Penh
28/8	Synthesis workshop	Core Team & senior WaterSHED staff	Phnom Penh
29-30/8	Documentation	Consultant	Phnom Penh
31/8-4/9	KIIs with key sector stakeholders	Consultant	Phnom Penh

## 2.4 Limitations

### Program design documentation

WaterSHED provided a large amount of information on WaterSHED's program, especially related to latrine sales data. Despite this documentation and WaterSHED's clear Vision and Mission for the organisation, the lack of a strategy document or business plan made it somewhat difficult to define the limits of the *Hands-Off* program and how it fitted with WaterSHED's overall operations. The project proposal submitted to the Stone Family Foundation was used as the 'Project Design Document' and as the source of targets against which performance was assessed. The original proposal, however, was out of date, listing only four provinces and including targets that had subsequently been adjusted (such as a latrines sales target of 103,536). These issues did not influence the way the evaluation was conducted but did limit the certainty with which achievement of targets could be reported.

### Sample size for qualitative processes

In light of the considerable amount of quantitative data already available, the evaluation concentrated on using qualitative processes to analyse performance and corroborate/contest existing reporting. The range of experiences investigated through the qualitative process was limited by the time and resources available. Only one district in each of two of the program's eight provinces were visited. Within these two districts, six commune councils and six suppliers were interviewed and ten villages visited. On this basis, findings from the qualitative processes are indicative rather than definitive. Analysis of the findings by a wide range of WaterSHED staff, from all program areas and with a diverse and extensive knowledge of the program, provided a contextual understanding for exploration of the qualitative results.

### Lack of Poverty Data

The evaluation aimed to determine the extent to which poor households accessed sanitation through the *Hands-Off* program. The Cambodian government uses two household poverty ratings (ID1 and ID2 Poor households). Understandably, suppliers do not collect nor record the wealth classification of their clients. WaterSHED has collected that information on a sample basis for both adopters and non-adopters as part of the RCSAS study. A combination of remoteness of villages and low coverage percentages were used as proxy parameters when choosing villages for the evaluation that were likely to include significant percentages of ID1 and ID2 Poor households.

### Evaluation Team Composition

A core evaluation team was established with five members who participated in all the field activities, as well as the Reflection and Synthesis workshops. This team was supplemented with additional members for the two provincial visits. While this meant that a larger number of WaterSHED staff were involved in the evaluation activities, it also increased the number of participants who needed to

be briefed about the purpose and processes of the evaluation. There was some variation in the level of understanding of the evaluation amongst the team members in each province.

#### Assessing WaterSHED's influence

Assessing the degree to which WaterSHED has influenced the rural sanitation sector in Cambodia is invariably subjective in nature. The assessment draws on the opinions expressed by staff from boundary partners and peer agencies. To maximise objectivity and gain honest and accurate reflections from key stakeholders, the Lead Consultant organised and conducted interviews with these key informants without WaterSHED staff involvement. Whilst inevitably subjective in nature, the information provided useful insights into how WaterSHED is perceived by its peers and its influence within the sector.

#### Cost data

WaterSHED's scope of work called for a comparison of delivery costs between the *Hands-Off* program and approaches delivery by other stakeholders. In practice, other stakeholders consulted for the evaluation were unable to provide detailed cost data that could be used for a rigorous cost analysis. This inhibited the extent to which WaterSHED's delivery efficiency could be compared with that of other agencies.

### 3 Development impact

#### 3.1 Latrine sales and coverage increase

The WaterSHED *Hands-Off* program resulted in the sale of 79,660 latrines, achieving its target for latrine sales during the Expansion Phase and providing improved sanitation access to an estimated 376,000 people.<sup>15</sup>

The original proposal to the Stone Family Foundation included a sales target of 103,536 latrines to be achieved in four provinces—Battambang, Pursat, Kampong Cham and Pailin. During implementation the number of provinces was expanded to include Kampong Chhnang, Kampong Speu, Takeo and, later, the newly created province of Tboung Khmum (which was created from a division within Kampong Cham in 2014). During this period the sales target was revised down to 79,453 latrines.<sup>16</sup>

The annual and final reports for the Stone Family Foundation outlined a number of factors that had required a reduction in the original target. In particular, WaterSHED reported considerable disruption due to national elections in 2013. Sales activities, especially community meetings for sales events, were severely limited during this period, significantly reducing sales. This was followed by a severe bout of flooding later in 2013 that also affected latrine sales and deliveries. WaterSHED monitoring reports also noted that a high turnover of sales agents and WaterSHED staff contributed to sales being lower than expected.<sup>17</sup>

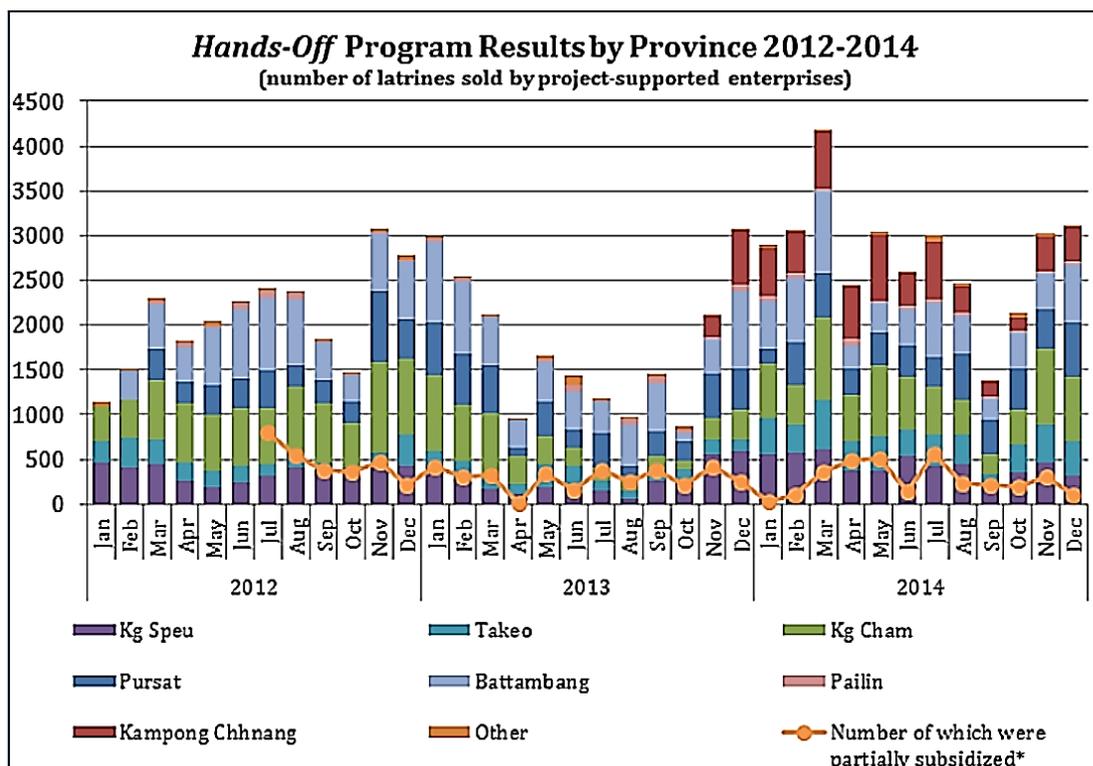


FIGURE 2 LATRINE SALES BY PROVINCE 2012-2104<sup>18</sup>

<sup>15</sup> WaterSHED (2014) *Stone Family Foundation Final Report, Dec 2014*.

<sup>16</sup> Evaluation Scope of Work (Annex A).

<sup>17</sup> WaterSHED, (2012-14) *Stone Family Foundation project proposal, 6 monthly, annual & final reports (period Jan 2012 – Dec 2014)*

<sup>18</sup> WaterSHED (2014) *Stone Family Foundation 2014 Annual Report/Final Report*

## Coverage

In addition to sales, the program proposal also set a target for improved sanitation coverage. Across the program area as a whole the *Hands-Off* program aimed to deliver an overall coverage of 46% and in each of the target districts a minimum of 36%. The district figure was set to exceed the Cambodian MDG target at a national level of 30%.

The program's final report notes that 45% coverage was achieved across the original four target provinces and that the coverage across all eight provinces increased to 43%. At district level, 31 of the 54 districts achieved the target figure of 36%.<sup>19</sup> WaterSHED monitoring data used to determine these results was supplemented by a detailed survey of latrine coverage conducted by WaterSHED in cooperation with Cambodian government authorities covering all villages in all districts in the program's eight provinces.<sup>20</sup>

Coverage data presented here (Table 3) has been extracted from a recent WaterSHED coverage survey conducted in conjunction with MRD and MoI.<sup>21</sup>

**TABLE 3 COVERAGE INCREASES BY PROVINCE, 2011-2014**

Province	2011 Coverage	2014 Coverage	Coverage Increase [%]		
			Total	Excluding business-as-usual (1.3% p.a.)	Net Change/Year
Battambang	45.2	54.2	9.0	5.1	1.7
K. Cham*	25.6	40.4	14.8	10.9	3.6
K. Chhnang	22.7 <sup>†</sup>	38.0	15.3	11.4	3.8
K. Speu	27.0	33.0	6.0	2.1	0.7
Pailin	40.6	51.6	11.0	7.1	2.4
Pursat	18.7	43.0	24.3	20.3	6.8
Takeo	23.0	41.9	18.9	15.0	5.0
<b>Averages</b>	<b>29.0</b>	<b>43.2</b>	<b>14.2</b>	<b>10.3</b>	<b>3.4</b>

\*Kampong Cham figures include Tboung Khmum province data

<sup>†</sup> 2011 data not available, estimated from 2008 data and adding 1.3%/year

The change in coverage figures needs to be compared against the background growth rate for sanitation. Data for individual provinces is not available but the national business-as-usual increase is estimated to be 1.3% per year.<sup>22</sup> The average net increase attributable to the Hands-Off program, across the eight target provinces during the Expansion Phase was 3.4% per year, almost three times the background rate of change.

Sanitation marketing programs that meet their targets are sometimes criticised for a tendency to spread programs geographically to reach new markets rather than work to reach deeper coverage in existing program areas.<sup>23</sup> To avoid this, in August 2011 WaterSHED convened a discussion chaired by

<sup>19</sup> Ibid.

<sup>20</sup> WaterSHED(2015) *A Survey on Basic Water and Sanitation facilities in Eight Target Provinces of WaterSHED in Cambodia*

<sup>21</sup> Ibid.

<sup>22</sup> Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia*, cites 1% p.a. but the RCSAS (Pedi et al. 2014) cites 1.3% p.a. which has been used in this evaluation.

<sup>23</sup> Robinson (2011) *iDE Cambodia Sanitation Marketing Project Review*

the Ministry of Rural Development to ensure that all agencies conducting sanitation marketing in Cambodia committed to covering all areas within each province they target and not move between areas ‘cherry picking’ the easiest sales.

WaterSHED’s data shows that while coverage across the eight provinces averaged 43%, district coverages varied markedly with 23 of the 54 districts having coverages less than the target figure of 36%.<sup>24</sup> This may be partly explained by the fact that all of the additional provinces subsequently included in the *Hands-Off* program had quite low coverages in 2011: Kampong Chhnang—23%, Pursat—19% and Takeo—23%.

Information collected during the visits to ten communities in Battambang and Kampong Speu reflected the significant increase in latrine coverage achieved as a result of the program. Communities were chosen purposefully to provide a mixture of low, medium and high coverage communities. In all but one case, the coverage reported by the community leaders exceeded the district government coverage data provided by WaterSHED. The exception, Svay Kang village, is discussed below.

TABLE 4 SANITATION COVERAGE—COMMUNITY ESTIMATES VERSUS WATERSHED DATA

Province, District	Village/Community	Coverage from WaterSHED records	Coverage, estimates by community leaders
<b>Battambang, Sangkae</b>	Svay Kang	100%	70+%
	Voat Kandal	67%	70%
	Prey Svay	28%	70%
	Samdach	63%	65%
	Svay Sa	28%	60%
<b>Kampong Speu, Kong Pisey</b>	Prey Pngor	80+%	90+%
	Boeng Changriek	19%	39%
	Boeng Roneal	34%	41%
	Boeng Ngoung	28%	75%
	Snuol Chrum	54%	68%

#### ODF communities

The maximum health impact from sanitation programs is achieved when all households in a community have and use improved latrines. Creating ODF communities is an explicit element of the government’s National Strategy.<sup>25</sup> In its original project proposal, the priority articulated by WaterSHED is enabling the middle three wealth quintiles (i.e. 20-80% wealth ranked households) to gain improved sanitation. Given that existing coverage in Cambodia is likely to reflect latrine ownership in the wealthiest households, it is the poorest quintile that is most likely to remain without improved sanitation following a sanitation marketing campaign.

<sup>24</sup> WaterSHED(2015) *A Survey on Basic Water and Sanitation facilities in Eight Target Provinces of WaterSHED in Cambodia*

<sup>25</sup> Royal Government of Cambodia (2014) *National Strategy Plan for RWSSH 2014-2025*

Nevertheless, the *Hands-Off* program had a target of at least 80 villages reaching 100% access to improved sanitation. This was easily exceeded, with WaterSHED reporting that 429 villages reached 100% access during the period of the Expansion Phase. It should be noted that WaterSHED defines ‘100% access’ as being villages with over 80% latrine coverage. The assumption is that through sharing of facilities this will enable 100% access.<sup>26</sup> This is consistent with the Cambodian government’s position, but represents a departure from the internationally recognised JMP definition, which does not count shared latrines as improved sanitation.<sup>27</sup>

The evaluation included visits to two villages with high coverage according to government data analysed by WaterSHED. Svay Kang in Battambang province was said to have 100% coverage but the village authorities and participants in the FGD indicated that the coverage was around 70%. The transect walk supported this assessment, encountering some houses were found not to have latrines. The other high coverage village was Prey Pngor in Kampong Speu province. Meetings with village authorities and the focus group discussion confirmed that the coverage was more than 80% but less than 100%. Community members said that there was very little open defecation as people without latrines used their relatives’ latrines. The transect walk corroborated this assessment, finding there were sometimes two houses in each compound but only one latrine. This suggests that in some cases the ‘compound’ rather than ‘household’ should be treated as the primary unit for determining coverage.

#### Access by income strata

The evaluation sought to make some analysis of the characteristics of adopting households by income strata. The RCSAS report found that latrine adopters were generally better off than non-adopters but that there was evidence that some poor households were investing in latrines. The Cambodian government has a formal poverty classification system, designating households as either ID1 (very poor) or ID2 (poor). Toilet ownership by poverty classification, based on the RCSAS data, is shown in the table below.

**TABLE 5 PERCENTAGES OF ID1 AND ID2 POOR HOUSEHOLDS WITH AND WITHOUT LATRINES<sup>28</sup>**

Province	2014 Coverage	% of ID1&ID2 in the province	% of households with latrines that were ID1&ID2	% of households without latrines that were ID1&ID2
Kampong Speu	33%	21%	5%	26%
Kampong Cham	40%	16%	17%	29%
<b>Averages</b>	<b>37%</b>	<b>19%</b>	<b>11%</b>	<b>28%</b>

This data shows that in the two provinces assessed by the RCSAS study an average of 19% of households were either ID1 or ID2 poor, broadly representing the lowest quintile (20%) from an economic perspective. This fifth of all households represented just one tenth (11%) of latrine ownership. Significantly, poor households make up 28% of those still without latrines. There is a clear indication that latrine coverage for ID1 and ID2 poor households is much lower than the provincial

<sup>26</sup> WaterSHED, (2012-14) *Stone Family Foundation project proposal, 6 monthly, annual & final reports (period Jan 2012 – Dec 2014)*

<sup>27</sup> WHO/UNICEF. (2015). *Estimates of the Use of Improved Sanitation Facilities, Joint Monitoring Programme for Water Supply and Sanitation*

<sup>28</sup> Data sourced from Pedi et al. (2014) *Rural Consumer Sanitation Adoption Study*

average. Further analysis by WaterSHED of the RCSAS data showed that for the poorest households (i.e. ID1 poor), latrine coverage was only two thirds that of ID2 households.

Unsurprisingly, the RCSAS investigation found that the poorest households were usually the most likely to be non-adopters and the last ones to obtain a latrine. During the evaluation this was also consistently reported by almost all respondents (including MRD, PDRD, DORD, Commune Councillors, Suppliers, Village Chiefs, community members and other key stakeholders, such as INGOs and multilaterals). While this view was uniform amongst stakeholders, the explanation as to why it was the case varied significantly.

During the evaluation most respondents felt that the poorest households could not afford to buy latrines and required some form of subsidy. A number of other informants, however, said that the primary inhibiting factor was a lack of will or prioritisation by non-adopters. For example one PDRD official in Battambang said that ‘everybody can afford to build a latrine, even if it is a simple dry pit’ and that many households ‘waste money on lotteries and alcohol’, whereas they could use these funds to buy a latrine. Another view was that poor households can always access a loan from an MFI, making purchase a matter of will rather than affordability. This view was contested by the MFI loan staff who reported that the poorest households were both unwilling and unsuitable to take out loans.

While all these factors are no doubt valid to a certain degree, the evaluation team concluded that on balance the poorest segments of many villages often struggle to prioritise and afford purchase of improved pour-flush latrines currently available on the market in Cambodia. This makes achievement of 100% coverage difficult to achieve with the *Hands-Off* methodology alone.

### 3.2 Health and quality of life impacts

WaterSHED’s objective in the *Hands-Off* program is not to create profitable sanitation businesses for their own sake, but rather to improve the health and quality of life of rural Cambodian people.

Improved access to and use of water, sanitation and hygiene (WASH) facilities makes a very important contribution to human development, particularly improving health by preventing WASH-related diseases, especially diarrhoea in children under five years of age.<sup>29</sup> Other development impacts include economic gains from less time spent recovering from illness, less money spent on health treatments, as well as improvements in human dignity, greater convenience and security (especially for women and children) from accessing sanitation closer to people’s houses.<sup>30</sup>

To gain the maximum benefits from WASH interventions, some development programs include improvements in water supplies (both quality and quantity aspects), sanitation (effective human excreta disposal) plus hygiene promotion activities (particularly hand washing with soap at critical times).<sup>31</sup> While WaterSHED has other programs that target water filters and hand washing stations, the *Hands-Off* sanitation marketing program focuses just on sanitation. Therefore the primary focus

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<sup>29</sup> Liu et al (2015). *Global, regional, and national causes of child mortality in 2000–13, with projections to inform post-2015 priorities: an updated systematic analysis*. Also, Brown et al, (2013) *Water, sanitation, hygiene and enteric infections in children*.

<sup>30</sup> Bartram, J., & Cairncross, S. (2010). *Hygiene, sanitation, and water: forgotten foundations of health*, for international assessments. Also Hutton (2012) *Economic Assessment of Sanitation Interventions in Cambodia*, for a Cambodia specific economic analysis which estimates poor sanitation costs each rural household approximately \$66/year or 9% of their annual income.

<sup>31</sup> Cairncross et al, (2010) *Water, sanitation and hygiene for the prevention of diarrhoea*. Also Brown et al, (2013) *Water, sanitation, hygiene and enteric infections in children*.

of this evaluation from a development impact perspective is to what extent the *Hands-Off* program contributed to increased access and use of improved sanitation.

It is difficult to quantify the degree to which health benefits (particularly through reductions in diarrhoea in children under 5 years of age) can be attributed to improved sanitation access. A number of studies and meta-analyses, while all maintaining that sanitation is a vital primary preventative barrier to diarrhoeal infections, have given varied results. A recent review produced for Britain's Department for International Development considered all the best available evidence and concluded that the reduction in diarrhoea morbidity from an effective sanitation intervention was in the range of 32-36%.<sup>32</sup>

Health benefits rely on use of improved sanitation—not just access to it. Data from the RCSAS found that toilets purchased under the *Hands-Off* program are overwhelmingly used by household members—self-reported usage was 99-100% for adults and 88-91% for children.<sup>33</sup> Therefore, it is reasonable to attribute a significant reduction in the diarrhoeal disease burden for the additional 79,660 households that now have an improved latrine as a result of WaterSHED's program.<sup>34</sup>

**Disposal of infants' and babies' faeces.** Whilst usage rates of toilets by adults and children was found to be high in the RCSAS study, disposal of infant and babies faeces is somewhat problematic. Only 56% of respondents in Kampong Speu reported disposal in the toilet and 82% in Kampong Cham.<sup>35</sup> Lower rates were found in the recent study initiated by WaterSHED and conducted in collaboration with the London School of Hygiene and Tropical Medicine.<sup>36</sup> The study, conducted in 21 villages in two provinces amongst a sample of households with a latrine, found that 63% of households disposed of children's faeces in a latrine but that only 36% reported doing this on a consistent basis. It also cited a 2010 Cambodian Demographic and Health Study which concluded that only 20% of children's faeces are disposed of in an improved sanitation facility. While the RCSAS and IYCS studies recorded differing levels of hygienic disposal of infant and babies faeces, the IYCS study is considered likely to be more accurate as self-reporting of hygiene behaviours tends to overstate good practices and the IYCS study was specifically only looking at these practices.

The IYCS study referenced epidemiological work that has established that infant faeces are more likely to be infected with WASH related pathogens than that of adults. Consequently, sanitary disposal of infant faeces is of great importance for human health. The study results were also consistent with international findings that many adults in developing countries consider that infants and babies are 'innocent' and consequently that their faeces must be harmless, while the opposite is actually true.<sup>37</sup>

Therefore, while adult latrine use within the WaterSHED *Hands-Off* was found to be very high, the hygienic disposal of infant and babies faeces was less prevalent and as such an estimate of the program's health impact should be reduced accordingly. WaterSHED is aware of this issue and is playing a leading role in researching and developing meliorating strategies, including stimulating a

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<sup>32</sup> Cairncross et al, (2013) *DFID Evidence Paper – Water, sanitation and hygiene*

<sup>33</sup> Pedi et al (2014) *Rural Consumer Sanitation Adoption Study*

<sup>34</sup> Cairncross et al, (2013) *DFID Evidence Paper – Water, sanitation and hygiene*

<sup>35</sup> Pedi et al (2014) *Rural Consumer Sanitation Adoption Study*

<sup>36</sup> Miller-Petrie et al 2015) *Infant and Young Faeces Management: Potential enabling products for their hygienic collection, transport and disposal in Cambodia*

<sup>37</sup> Ibid.

market for re-usable nappies and infants potties. These are positive developments to address this issue.

**Open-defecation-free (ODF) communities.** One final caveat with respect to health benefits is the extent to which the *Hands-Off* approach is creating ODF communities (noted above). In most of the *Hands-Off* program areas there are still households without toilets where some people continue to practice open defecation. WaterSHED and others in the WASH sector in Cambodia are involved in investigating the links between sanitation, nutrition and stunting but there are currently few studies into the effects this may have on whole populations.<sup>38</sup> Intuitively it may seem reasonable to assert that there would be a proportional relationship between the number of people using latrines in a community and the reduction in the burden of disease. The argument behind CLTS, however, is that any household that open defecates presents a risk to the whole community and hence that there is likely to be a threshold coverage level below which significant health benefits do not accrue. Open-defecation-free environments are likely to give maximum health benefits.

#### Consumer Perceptions

While the health and potential economic benefits from improved sanitation have been established through a range of studies, consumers' own perceptions are testament to the benefits that improved sanitation provides. Understanding these benefits is particularly important to help sanitation programs tailor their promotion and marketing approaches.<sup>39</sup>

The WaterSHED RCSAS study and its work with Jenkins into consumer preferences found that convenience, ease of use, shame and embarrassment (from a lack of sanitation facilities) were key drivers for purchasing a latrine. Households who subsequently bought and were using latrines added the benefits of improved health and hygiene, cleanliness and lack of smell.<sup>40</sup> During the FGDs in ten villages, the Evaluation Team found that while health and hygiene improvements were frequently mentioned convenience, privacy and safety also featured strongly in people's stated benefits.

The RCSAS study confirmed that most program-related latrine owners experienced high levels of satisfaction with their latrines and had moved away from open defecation. The evaluation FGDs were consistent with these findings. Almost all participants were very satisfied with their latrines and a few mentioning that flushing water was sometimes scarce, especially during the dry season. In summary the evaluation affirmed that latrine owners expressed high levels of satisfaction with their latrines and the key development impacts from consumers' perspectives were improved health, convenience, privacy and safety.

#### Unintended consequences

Strong health benefits will accrue from WaterSHED's work, as detailed above. These benefits will be put at risk depending on what happens when latrine pits fill up and need to be emptied, raising the prospect of unintended negative consequences from the program. WaterSHED data indicates that 34% of consumers construct a single pit with three or fewer concrete rings. These toilets are likely to fill up in around five years depending on how many people use them and the soil conditions.

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<sup>38</sup> WSP (2013) *Scaling Up Rural Sanitation- Investing in the Next Generation: Growing Tall and Smart with Toilets. Stopping Open Defecation Improves Children's Height in Cambodia*

<sup>39</sup> Jenkins, M (2004) "Who Buys Latrines and Why?"

<sup>40</sup> Jenkins, M (Sep 2010) *Cambodia Sanitation Consumer Demand and Behavior Qualitative Study*, with regard to pre-purchase motivations. Also Pedit et al (2014) *Rural Consumer Sanitation Adoption Study* for post-installation perceived benefits

This issue has been raised in a number of studies on the rural sanitation sector in Cambodia, urging sanitation programs to consider ways to address this potential problem and the risk to long-term effectiveness and agency credibility.<sup>41</sup> These studies found that most households had reused or intended to reuse their original concrete lined pits, emptying the contents directly onto agricultural fields and orchards. Interviews with government authorities and households during the evaluation confirmed that there was not a good understanding of the health risks involved in spreading fresh pit contents back into the environment. To remove pathogens, human faecal matter needs to be confined for at least two years before reuse.<sup>42</sup> Full pits and poor disposal of the contents presents a potential ‘time bomb’, with the prospect that large quantities of faecal matter may be directly disposed into the environment, reversing some of the health benefits achieved by reducing open defecation. WaterSHED has recognised this as an important issue to be addressed in the next phase of its Hands-Off program.<sup>43</sup> A specific recommendation has been included in the Lessons and Recommendations section (Section 9).

## 4 Effectiveness and efficiency

### 4.1 Consumers

The evaluation affirmed that the *Hands-Off* approach is effective at creating consumer access to latrines that are affordable and desirable. As demonstrated by the sales and coverage information presented in the Development Impact section above, the program has been very successful at generating consumer demand and converting that demand into sales. Feedback received from consumers during the village visits indicated that most people were aware of the “core” latrine brochure, developed by WaterSHED, and in general consumers were content with the services being provided by the suppliers and the quality of the products provided. While some concrete rings arrived broken or with cracks, they were usually promptly replaced by suppliers. This information was consistent with the RCSAS results which reported that nearly 92% of respondents said suppliers were reliable and 73% said the quality of products was good.<sup>44</sup>

From the consumer perspective, the evaluation analysed three significant issues: access to finance; delays in installation; and reaching the poorest households. These are discussed below following an overview of the program’s effectiveness in generating consumer demand.

#### Consumer demand

The desk study reviewed a number of studies and reports that showed that while sanitation was not amongst the highest priority issues for rural households, there was considerable latent demand which could and has later been brought out by effective promotion, such as by CLTS and sanitation marketing activities.<sup>45</sup> Other studies have found that initial marketing attracts ‘early adopters’ but that sales often then slow down and require repeated promotional efforts to reach higher levels of coverage.<sup>46</sup> This was supported by interviews with KPs during the evaluation, several of whom said

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<sup>41</sup> Robinson (2011) *iDE Cambodia Sanitation Marketing Project Review*; Hybrid Strategies Consulting. (2014) *Designing the next generation of sanitation businesses*; Padi et al (2014) *Rural Consumer Sanitation Adoption Study*

<sup>42</sup> WELL (2006) *Emptying Pit Latrines* Water, Engineering and Development Centre, Loughborough University.

<sup>43</sup> WaterSHED (2015) *Stone Family Foundation “Consolidation Phase” proposal, (2015-2017)*

<sup>44</sup> Padi et al (2014) *Rural Consumer Sanitation Adoption Study*

<sup>45</sup> Jenkins (2010) *Cambodia Sanitation Consumer Demand and Behavior Qualitative Study*.

<sup>46</sup> Padi et al (2014) *Rural Consumer Sanitation Adoption Study*. Robinson (2011) *iDE Cambodia Sanitation Marketing Project Review*

that while the promotional materials were good, they felt that they personally lacked the skills to convince non-adopters to purchase latrines and that as coverage rates reached higher levels this became more and more of an issue. During the evaluation interviews, several government and INGO staff also expressed an opinion that sanitation marketing promotion worked well with certain segments of communities, resulting in initial latrine sales, but that in general CLTS processes were better at motivating whole communities to end open defecation.

Broadly, the market for sanitation in a rural Cambodian village after an initial marketing drive can be divided into three groups—existing latrine owners, early adopters, and non-adopters. Sanitation marketing programs have found that there are usually some households in a community that already own and use a latrine and that when the sanitation marketing program begins there are a number of ‘early adopters’ who quickly respond to marketing. Achieving total coverage is more difficult, as the remaining households (‘laggards’ in marketing terms) say they can’t afford to buy the product or are resistant to changing their behaviour.<sup>47</sup> WaterSHED’s program works most readily with the middle quintiles, and these are generally described by WaterSHED as their target group (Figure 3).



**FIGURE 3 WEALTH QUINTILES AND THE HANDS-OFF APPROACH**

WaterSHED reported that it has worked in collaboration with a number of CLTS programs. The evaluation did not include any communities where this had occurred so this collaboration could not be explored directly with consumers. A meeting was held, however, with World Vision staff in Battambang, who reported that there had been very good cooperation with WaterSHED in Moug Ruessei district of Battambang province, where World Vision had conducted CLTS and referred households to the WaterSHED suppliers with very good results. This was the only example that the evaluation came across involving the combination of the *Hands-Off* sanitation marketing program with CLTS, but the reported outcomes were very positive and may warrant further consideration with future programming.

The RCSAS found that one of the key factors associated with latrine adoption was off-farm income and the evaluation results were consistent with this finding. In addition to increased income, exposure to improved sanitation facilities and hygiene practices was also found to be an important driver. In Battambang a number of adopters said that their family members had been working in Thailand or in business in urban areas in Battambang and Pailin, and through that experience had exposure to sanitary latrines and so did not want to return to open defecation when in their villages. The off-farm income provided by this work gave them the funds to purchase pour flush latrines. A similar situation was found in Kampong Speu where the main off-farm work was in garment factories employing mostly young women.

<sup>47</sup> Pedi et al (2012). *Sanitation Marketing Lessons from Cambodia: A market-based approach to delivering sanitation*. WSP-EAP Field Note.

#### Access to finance

The *Hands-Off* program has mounted a number of strategies to improve coverage levels, such as linking potential consumers with MFIs and encouraging suppliers to offer payment by instalments. Little traction has been gained with encouraging suppliers to offer finance. Suppliers interviewed for the evaluation who had trialled this explained that they had stopped offering credit when they found it too costly/difficult to follow up consumers for repayments. Links to MFIs have been more successful. A number of reports on MFI linkages with sanitation marketing programs have been undertaken.<sup>48</sup>

While demand for loans from consumers has been high, MFIs have expressed difficulty accommodating them within their existing lending portfolio. The primary issues have related to the small size of latrine loans, which from the MFI perspective require too much time to manage and do not cover their transaction costs. To address this WaterSHED promotes splitting the commission on latrine sales between the MFI and the KP so that MFIs receive \$1 in addition to their normal lending margin. FGD participants in Battambang reported that loans were popular with many consumers and suppliers also affirmed that MFI loans enabled them to make more sales. The evaluation found that the loan processes were very effective in one province visited (Battambang) but less so in the other (Kampong Speu), indicating that when it is working well it can be a key enabling factor.

VisionFund staff interviewed during the evaluation reported that the usual loan amount for most households in relation to latrines was approximately \$50, which was enough to cover the cost of the 'core' product. Loans of this amount could be approved by the VisionFund field worker (CSO) without further authorisation whereas bigger amounts required higher approval and were considered 'more difficult' and hence were much less common. They also expressed the concern that poor households may not be able to pay back larger amounts.

#### Latrine installation

During the community visits the evaluation team found that most households who had purchased latrines had either already installed them or intended to. Some latrine packages, however, were awaiting installation, illustrating a problem identified by WaterSHED during the Expansion Phase. The main reason reported for not installing the latrine was 'saving up to buy a good shelter'. While the core latrine components, plus delivery, costs around \$50 (designed around this price point based on willingness-to-pay formative research), it has been found that many households desire a 'high end', good quality latrine shelter (often using bricks or cement blocks) which typically costs an additional \$250-500.<sup>49</sup> The RCSAS study found that installation is frequently delayed by several weeks or even months while saving up to meet shelter construction costs.<sup>50</sup>

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<sup>48</sup> Emerging Markets Consulting, (2014) *Study on the Experiences of Existing MFI Models Financing Sanitation in Rural Cambodia*, prepared for GSF. (Also unpublished Microfinance Study commissioned by WaterSHED in 2012)

<sup>49</sup> Pedit et al, (2014), *Rural Consumer Sanitation Adoption Study*. Hybrid Strategies Consulting. (2014) *Designing the next generation of sanitation businesses*; Pedit et al (2012). *Sanitation Marketing Lessons from Cambodia: A market-based approach to delivering sanitation*. WSP-EAP Field Note.

<sup>50</sup> Pedit et al, (2014), *Rural Consumer Sanitation Adoption Study*. Which found that 50% of purchases had installed within 6 months and nearly 100% after 18 months or more.



FIGURE 4 CORE LATRINE COMPONENTS AWAITING INSTALLATION

WaterSHED is working on the development of more affordable latrine shelters (as are other sanitation marketing agencies, iDE and WTO) to minimise installation delays and increase sales to poorer households. Three potential models are currently being trialled at price points of around \$200-300 but none have yet gone to market.<sup>51</sup> In 2015 WaterSHED's shelter design team was selected as finalists in the American Society of Mechanical Engineers (ASME) design competition, and WaterSHED plans to bring a desirable and affordable shelter to market sometime in 2016.<sup>52</sup>

While there was clearly a preference for a 'high end' latrine shelter, the evaluation team found that some households had built simple shelters out of local materials and had not delayed installation. It was not clear why this had occurred but these instances tended to be in the more remote villages visited, so may be related to lower visibility (less likely to be seen by "outsiders") or lower income. That said, households in one relatively remote village (Boeng Ngoung, Battambang province), said they only wanted to build expensive shelters to distinguish them from a neighbouring village which they felt was poorer than them.

The desk study undertaken as part of the evaluation also indicated that WaterSHED had put considerable effort into encouraging sanitation suppliers (SPs) to offer an installation service, in an effort to speed up installation rates.<sup>53</sup> The final report to the Stone Family Foundation recorded that 41% of SPs were now offering installation, against a target of 50%.<sup>54</sup> The evaluation team found that while three of the six suppliers interviewed offered an installation service they found the take-up rate amongst consumers was low and some suppliers had stopped offering the service. During FGDs consumers did not report the availability of an installation service as very important. Rather, their

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<sup>51</sup> Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia*

<sup>52</sup> WaterSHED (2015) *Stone Family Foundation "Consolidation Phase" proposal, (2015-2017)*

<sup>53</sup> Pedi et al, (2014), *Rural Consumer Sanitation Adoption Study*

<sup>54</sup> WaterSHED, (2012-14) *Stone Family Foundation project proposal, 6 monthly, annual & final reports (period Jan 2012 – Dec 2014)*

view was that having the funds to build a good shelter was the critical factor. The RCSAS study affirmed that while there were delays to installation, almost all latrines are eventually installed suggesting that the measures WaterSHED has adopted to address this issue have largely been successful.<sup>55</sup>



FIGURE 5 DIFFERENT STYLES OF LATRINE SHELTER

Sales to the poorest households

Arguably the weakest element of the *Hands-Off* approach is that it does not specifically cater to the poorest households in rural Cambodia. The RCSAS evaluation found that a significant proportion of non-adopters were ID1 or ID2 poor.<sup>56</sup> Improving access for the poorest households is a priority for the Government of Cambodia, with the National Strategic Plan requiring that sanitation activities, ‘give priority to the poorest and most underserved people and areas’.<sup>57</sup> WaterSHED does not see great scope for further reductions in the cost of the core latrine components and is working towards a shelter design that will cost several multiples of the core components. Consequently, it does not appear likely that cost reductions will increase access to the poorest households.

The question of whether the poorest households may need some form of subsidy is an unresolved issue in the sector. Government policy promotes non-hardware-subsidy approaches such as CLTS and sanitation marketing. Many agencies and suppliers expressed the view—widely shared internationally—that programs offering hardware subsidies dampen consumer demand and inhibit communities taking swift action to end open defecation. Despite this, several people and organisations consulted during the evaluation also said there may be some justification for providing some limited subsidy for the very poorest households to achieve total coverage in rural communities. These stakeholders—and WaterSHED—argued that some subsidy support could be applied, but only to the poorest (ID1) households and only *after* a particular community had reached a high level of

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<sup>55</sup> Pedi et al, (2014), *Rural Consumer Sanitation Adoption Study*. The study found that 50% of purchases had installed within six months and nearly 100% after 18 months or more.

<sup>56</sup> Pedi et al, (2014), *Rural Consumer Sanitation Adoption Study*

<sup>57</sup> Royal Government of Cambodia (2014) *National Strategy Plan for RWSSH 2014-2025*

coverage (typically over 80%). Interviews with MRD officials indicated that the government is considering developing a policy on this issue as part of the rollout of the NSP-RWSSH 2014-2025.

While WaterSHED has expressed concern about the dampening effects of introducing subsidies it ran its own small trial in Kampong Speu province, providing a limited number of discount 'vouchers' to poor households in high coverage villages.<sup>58</sup> ID1 households were offered a \$20 subsidy voucher and ID2 households \$10 and these were only offered in villages that had achieved a sanitation coverage of 80% or more. Two of these households were visited during the evaluation and it was found that the latrines were well constructed and being used. There did not seem to be any negative reactions from other households in the village that had not received subsidies, which indicates that a well designed and implemented subsidy program may assist in moving high coverage communities to 100% coverage.



FIGURE 6 LATRINE CONSTRUCTED WITH ASSISTANCE OF A HARDWARE SUBSIDY

Increasing access to finance may provide part of the solution for poor households but is not the complete answer. WaterSHED and the other sanitation marketing agencies active in Cambodia have sought to include loans to make it easier for low-income rural consumers to purchase and install latrines.<sup>59</sup> While links between WaterSHED-supported suppliers and MFIs, including VisionFund, were found to have enabled a considerable number of households to buy the core latrine product, most loans were insufficient to also include installation and, more importantly, the cost of a high-quality shelter. VisionFund staff reported that there was considerable reluctance from the poorer households to take on any or an increased level of debt.

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<sup>58</sup> Pedi et al,(2014), *Rural Consumer Sanitation Adoption Study*

<sup>59</sup> Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia*

## 4.2 Supply side

The *Hands-Off* approach maintains that the market is the optimal mechanism for a majority of rural Cambodians to achieve sanitation, and is a necessary component for Cambodia to achieve total sanitation coverage. Sanitation marketing programs in Cambodia have stimulated a significant number of businesses to direct or expand their businesses to provide latrines to rural consumers.<sup>60</sup> The recently published Service Delivery Assessment reported that low-cost, pour flush latrines were now available from private suppliers in 150 of the 185 districts in Cambodia as a result of ‘...the rapid spreading of sanitation marketing through building private sector capacity.’<sup>61</sup>

WaterSHED has played a strong part in this achievement. During the Expansion Phase the *Hands-Off* program had achieved the active engagement of 174 sanitation enterprises providing products and services in each of the 54 districts in which the program operates. The spread of these suppliers provides an average of 3.3 suppliers per district, exceeding the target of three per district.<sup>62</sup>

The evaluation team met with six program-supported suppliers during the field visits and found that, while some were more active than others, all were satisfied with the number of latrines sales and that their profit margins were sufficient incentive to continue selling latrines. Each of the suppliers advised that latrine sales were an important part of their business. Three of the six suppliers interviewed stated that sales were slowing down in some villages as coverage reached higher rates and that newer sales were sometimes in more remote villages where transportation of latrine components was both more difficult and more costly. It was also noted by the evaluation team that—perhaps because WaterSHED staff were keen to keep costs to consumers affordable—the \$50 price for core package supply and delivery was interpreted by some suppliers as being a ‘fixed price’ not to be exceeded.

One of the constraints facing suppliers is that most latrine sales have occurred around harvest time and into the dry season, when rural households tend to have funds for discretionary spending (and latrine construction is easier due to drier soil conditions).<sup>63</sup> As a consequence, suppliers sometimes had difficulties meeting the high-season demand. Problems included not being able to get extra staffing for the limited period, sometimes having to turn down orders, and sometimes producing poorer quality product. Poor products resulted from inadequate concrete curing, leading to some complaints and broken components. To some extent, the links WaterSHED has forged with MFIs has ameliorated this issue, making latrine purchases possible for households throughout the year, smoothing out sales and production, and improving cash flow and business efficiency for suppliers. Several suppliers interviewed for the evaluation affirmed that the introduction of loans had improved their sales and business efficiency.

### Sales Agents

Suppliers reach consumers through Sales Agents or ‘Key Persons’, with the *Hands-Off* approach typically involving one Key Person (KP) in every village. In practice the KP is often, but not always, the

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<sup>60</sup> Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia*. and WSP, (2015), *Water Supply and Sanitation in Cambodia - Service Delivery Assessment*

<sup>61</sup> WSP, (2015), *Water Supply and Sanitation in Cambodia - Service Delivery Assessment*

<sup>62</sup> WaterSHED, (2012-14) *Stone Family Foundation project proposal, 6 monthly, annual & final reports (period Jan 2012 – Dec 2014)*

<sup>63</sup> Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia*. Robinson (2011) *iDE Cambodia Sanitation Marketing Project Review*

village chief or a commune councillor and is trained in latrine promotion, including sales events and door-to-door selling. Most of the suppliers interviewed during the evaluation worked with about ten KPs. The KPs receive a commission for each sale referred to the supplier, typically \$2.50 per latrine sold. Where a VisionFund loan is involved the commission is split 60:40 between the KP and the VisionFund loan officer (so that the KP only receives \$1.50). Suppliers and the KPs interviewed for the evaluation felt that these arrangements worked well. Commissions, however, were not the only motivator driving KP activities. Almost all of the eight KPs interviewed said that the commission was appreciated but not all-important to them. They noted that it was also their responsibility (as village leaders) to encourage all households in their villages to have latrines and some were held accountable by commune councils. While promoting sanitation is one of the village leaders' responsibilities, in most cases leaders did not have sanitation plans for their villages and were not very active in promoting door-to-door sales. The development and implementation of such plans may be further facilitated through the progressive rollout of the Civic Champions program.<sup>64</sup>

There were several instances in Kampong Speu (Prey Pngor, Boeng Ngoung, Boeng Changriek, and Boeng Roneal) where according to the KPs no commission was ever paid but where this had not stopped the KP from promoting latrines in the village. The suppliers valued the role played by KPs not just in promoting sales but also helping suppliers identify delivery locations for each purchased latrine.



FIGURE 7 KEY PERSONS AND VILLAGE LEADERS, SVAY KANG VILLAGE, BATTAMBANG

KPs are generally identified and engaged by FSs rather than suppliers but WaterSHED had previously pushed suppliers to employ their own sales agents. While most suppliers seemed content with the current arrangements for KPs, two suppliers said they were considering or intending to employ their own fulltime sales agent as they thought this might boost sales. Interestingly, the evaluation team found that some households now go directly to the suppliers for services without involving KPs, as they now know where to find them and what services they provide. In most of these cases where this

<sup>64</sup> WaterSHED (2015) Stone Family Foundation "Consolidation Phase" proposal,(2015-2017)

was reported by the supplier, no commissions had been paid to the KP. This seemed to represent a potential development (or maturation) from the original model and neither the supplier nor the KP seemed unduly concerned that no commissions were being paid in such cases..

The evaluation identified concerns regarding the extent to which WaterSHED FSs are carrying out the role of KPs. This is also discussed below in Section 5. The only other reservation raised during the evaluation concerned the potential conflict of interest faced by those KPs who are village chief, deputy chief or commune councillor (understood to be the majority of cases). Having these office-bearers collect commissions raises the potential that they may use their position of authority within the community for personal gain rather than civic good. WaterSHED reported that to date this has never been raised by communities as an issue and while the evaluation team acknowledges the risk it would seem minimal and manageable.

#### Non-WaterSHED supported suppliers

The evaluation identified one additional area of note regarding the supply side of the market. The *Hands-Off* program provided a distinct advantage to its network of 174 suppliers, giving them assistance with promotion, product and business development advice. In each target district, however, there are a number of other non-WaterSHED sanitation suppliers who are not associated with an external sanitation marketing agency such as WaterSHED.<sup>65</sup> The RCSAS study, for example, found that in 2012 approximately 60% of all new latrines in two WaterSHED program areas were provided by sanitation enterprises not associated with the *Hands-Off* program.<sup>66</sup> The evaluation team interviewed three such suppliers, two in Battambang and one in Kampong Speu. While these suppliers had been selling latrines for some time, they reported that their sales had been increasing notably since the advent of the WaterSHED program. Interestingly, none of these suppliers were using the chamber box and concrete ring technologies developed by iDE and WaterSHED (in a consortium led by IDEO), yet were selling latrines for a similar price to the *Hands-Off* package—around \$50. Some commune councillors said they were also referring households to these non-WaterSHED suppliers and both PDRD officials interviewed said they felt that there was a ripple effect with more ‘private’ suppliers being active in the market since WaterSHED commenced their program. This could be seen as a threat to WaterSHED suppliers but also as evidence of the effectiveness of the *Hands-Off* program in stimulating the sanitation market.

The question now confronting WaterSHED, as it continues its sanitation marketing activities, is whether the change in context—from very few businesses to comparatively many—requires an adjustment in the way support is provided. As WaterSHED moves into new districts, an argument could be made for offering support to suppliers as a ‘package’. All interested parties who meet certain threshold criteria would be eligible for support and would then ‘graduate’ after some pre-determined point of time, to continue operating as standalone businesses. WaterSHED believes that an open market keeps prices low and quality high. Limiting support to a few suppliers, and providing support indefinitely, risks undermining the power of the market to create the best, most sustainable enterprises.

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<sup>65</sup> Robinson (2011) *iDE Cambodia Sanitation Marketing Project Review*. This review makes reference to the existence of ‘copycat’ suppliers.

<sup>66</sup> Pedi et al.(2014), *Rural Consumer Sanitation Adoption Study*

### 4.3 Comparison with other solutions

The recently published *Water Supply and Sanitation in Cambodia, Service Delivery Assessment* provides a strategic overview of the sector in both urban and rural areas in Cambodia.<sup>67</sup> It emphasises the key role to be played by non-hardware subsidy approaches such as CLTS and sanitation marketing. The 2015 JMP update indicates that the 2015 target of 30% rural coverage has been met and that the 2025 target of 100% coverage presents an enormous challenge.<sup>68</sup> MRD has developed plans to promote non-subsidy approaches but there has been very little investment by government to date in rural sanitation.

As has been previously outlined an increase of around 1.3% per year in sanitation coverage has been achieved primarily as a result of Cambodia's relatively strong rate of economic growth.<sup>69</sup> In the absence of strong government investment coverage increases to date have relied on households own investments and support from multilateral development agencies and international and local NGOs. The main sector actors have been UNICEF, WSP and ADB as well as approximately 50 NGOs, many of which are engaged in the WASH sector working group which is chaired and facilitated by MRD. The evaluation found that while some agencies had still been implementing hardware subsidy programs, the majority now support both CLTS or sanitation marketing or a combination of both approaches. The main agencies concentrating on sanitation marketing programs are WaterSHED, iDE, and WTO. Most agencies interviewed as part of the evaluation (including MRD, UNICEF, SNV and Plan) favoured CLTS as a primary approach linked to subsequent sanitation marketing activities.

WaterSHED and iDE are the sanitation marketing agencies with the largest programs in terms of scale.<sup>70</sup> The key points of difference between them are that the iDE strategy is to promote and sell as many latrines as possible, whereas WaterSHED's *Hands-Off* approach (while still aiming to work at scale) places more attention on working towards an eventual exit strategy, consequently giving considerable attention to the long term sustainability of businesses and local authorities to engage consumers. This includes not just sanitation but also water and hygiene products and services. To illustrate these differences, while iDE directly employ sales agents, WaterSHED arranges for suppliers to pay commissions to agents already in the community. By directly employing sales agents iDE may be able to better control promotion activities and achieve more sales, while the WaterSHED approach may be more sustainable after the agencies eventually exit the sector. Similarly the evaluation found that WaterSHED placed considerable emphasis on engaging with government within sector forums, in policy development and providing capacity building support, whereas iDE allocated less effort to this area.<sup>71</sup>

WaterSHED's *Hands-Off* approach aligns well with the government's strategy of supporting non-subsidy approaches and building sanitation markets. The National Strategy and MRD representatives interviewed during the evaluation highlighted CLTS as the primary approach to end open defecation and tended to articulate the role for sanitation marketing as enabling households to obtain a good quality latrine.<sup>72</sup> Further, the National Strategy outlines that priority should be given to reaching the poorest and most underserved households. This presents a challenge to WaterSHED as the

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<sup>67</sup> See WSP, 2015 in references

<sup>68</sup> See WHO/UNICEF, 2015 in references for JMP data

<sup>69</sup> See WSP, 2015 plus RCSAS report (Pedi et al, 2014) in references

<sup>70</sup> See Dalberg 2015 in references

<sup>71</sup> See Stone Family Foundation reports for details of government engagement by WaterSHED. iDE information obtained from website <http://ide-cambodia.org/> plus interview with iDE Director

<sup>72</sup> Information sourced from National Strategy and Draft National Action Plan, as well as from interviews with MRD staff.

evaluation found that the *Hands-Off* approach, as it is currently practiced, focuses on supporting the development of a dynamic sanitation market which targets the 20-80% wealth quintiles but it is generally the poorest 10-20% of households that are the most difficult to reach using this approach.

WaterSHED has working agreements with 15 other organisations active in the rural sanitation sector in Cambodia. These include other organisations that have implemented CLTS within WaterSHED program areas, such as SNV, and especially those taking part in the GSF program. The evaluation also heard of a similar arrangement operating in one district in Battambang with World Vision. While WaterSHED has reported that integrating its *Hands-Off* approach with other NGO programs has presented some difficulties, it may be worthwhile to look at further integration of CLTS processes (through partnerships with other agencies) to better achieve ODF communities and better align with the government's strategy of prioritising the poorest households. These issues are discussed further in the Scalability section, below.

#### Cost Effectiveness

The Evaluation scope of work tasked the evaluation with assessing the delivery cost of the *Hands-Off* programs against other sanitation interventions. The final project report provided to the Stone Family Foundation indicated that the total program costs divided by the number of latrines sold produced a figure of \$22.50 per latrine. This compared favourably with the target figure of \$23.22.

SNV and iDE representatives were interviewed for the evaluation and asked about unit costs for their program delivery. Neither agency was able to provide information regarding costs per latrine sold. Publically available data suggests that iDE's costs are approximately \$57 per latrine.<sup>73</sup> Toilets constructed under an ADB hardware subsidy program involved a cost to the project of \$104 per latrine.<sup>74</sup> These figures suggest that WaterSHED's costs were significantly lower than those of other programs in Cambodia. Data for the Global Sanitation Fund in Cambodia—known as the CR-SHIP—illustrates the difficulty of comparing cost data across programs. The CR-SHIP website suggests costs of \$18 per household with improved sanitation but does not make clear whether this includes or excludes baseline sanitation coverage.<sup>75</sup> Excluding baseline coverage would significantly increase the cost per latrine.

The apparent lower unit cost for WaterSHED than than iDE may be associated with the delivery approach. WaterSHED's philosophy is to minimise what it takes responsibility for and maximise the use of existing structures. For example, while iDE directly employs its sales agents, WaterSHED facilitates suppliers to contract their own sales agents, who live in target villages and are paid commissions by the suppliers.

As CLTS is the other major non-subsidy approach implemented in Cambodia the evaluation sourced some information which enabled some costs comparisons with the *Hands-Off* approach. An economic cost/benefit assessment of sanitation interventions conducted in 2012 documented that Plan Cambodia's CLTS program costs were estimated to be approximately \$54 per latrine.<sup>76</sup> Similarly, a three-country assessment of WaterAid CLTS programs in Bangladesh, Nepal and Nigeria documented program implementation costs varying from \$7-\$84 per latrine but averaging \$36. These unit costs exceed that of the *Hands-Off* program, indicating that while CLTS is considered a

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<sup>73</sup> See <http://m.forum.susana.org/forum/categories/167-market-development-in-action/11517-ide-sanitation-marketing-scale-up-smsu-10-project-details>

<sup>74</sup> See <http://www.adb.org/sites/default/files/project-document/60159/34382-022-cam-pcr.pdf>

<sup>75</sup> See <http://wsscc.org/global-sanitation-fund/cambodia/>

<sup>76</sup> Hutton (2012) *Economic Assessment of Sanitation Interventions in Cambodia*

low-cost methodology (primarily due to its no hardware subsidy approach) there are nevertheless considerable program delivery costs.<sup>77</sup> Further, there are questions regarding the durability and quality of CLTS-generated latrines. If the unit cost for CLTS programs were to be calculated on the basis of the number of durable, pour-flush latrines constructed, then it is plausible that the costs would be significantly higher again. Nonetheless, definitive comparisons cannot be made without detailed cost information from a range of agencies.

The evaluation found that WaterSHED and comparable agencies were still expending a considerable amount of their time and funds on refining their delivery models and that cost-per-sale data was both difficult to ascertain (as most agencies were unable to provide relevant information) and to an extent it is considered too early to be of critical importance. Of greater importance at this stage in the development of sanitation marketing in Cambodia is a comparison of the effectiveness of the various models being implemented by different agencies.

## 5 Sustainability

The evaluation considered sustainability from the perspective of consumers, suppliers and government, examining whether these stakeholders are able and likely to sustain the achievements of the *Hands-Off* program following WaterSHED's exit and what opportunities exist to strengthen that likelihood.

### 5.1 Consumers

The evaluators argue that the key indicator for sustainability of sanitation outcomes at the household level is the extent to which households value and use their toilets. If a household values and uses their toilets they are likely to take measures to ensure its ongoing function. Secondary data and discussions with users during the evaluation suggest that the level of use is high. The RCSAS found that over 90% of households that bought new latrines in the *Hands-Off* program area had never owned a latrine before and had mostly practiced open defecation. The study found that amongst latrine adopters there was very little open defecation—3% for adults and 15% for children.<sup>78</sup> This was consistent with information gathered by the evaluation team, with most adopters expressing a high level of satisfaction with their latrines. There were no signs during the evaluation or indications in the secondary data to suggest that the sanitation behaviour change is anything other than permanent.

The quality of the latrines promoted through the WaterSHED program is central to the high levels of user satisfaction. They are constructed of durable materials and provide a quality, desirable product. Formative research conducted as part of the sanitation marketing methodology found that rural households have a strong preference for solidly constructed pour flush latrines.<sup>79</sup> As reported in the RCAS study, consumers will often delay installation of their latrines until they can afford to build a good quality superstructure, so that latrine core components are typically paired with durable latrine shelters. Discussions with consumers during the evaluation indicated that the quality of the latrine significantly influenced user satisfaction with many participants in the FGD stating that they did not

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<sup>77</sup> Evans et al (2009). *Sustainability and equity aspects of total sanitation programmes-A study of recent WaterAid-supported programmes in three countries: global synthesis report.*

<sup>78</sup> Pedi et al. (2014) *Rural Consumer Sanitation Adoption Study.*

<sup>79</sup> Jenkins (2010) *Cambodia Sanitation Consumer Demand and Behavior Qualitative Study.* Pedi et al (2014) *Rural Consumer Sanitation Adoption Study.*

consider a dry pit latrine to be an acceptable long-term option and that households would rather continue to practice open defecation until they could afford a pour-flush model.

WaterSHED's program has a big advantage over other sanitation interventions from a sustainability perspective. Consumers pay for their toilets themselves, offering a very clear indicator that the toilet is valued, and hence likely to be maintained. This does not occur to the same extent where hardware is subsidised. And, in comparison to CLTS—which typically results in basic, dry pit toilets that are seen as unpleasant or temporary by consumers—WaterSHED's core package is seen as desirable and permanent and is an investment that can deliver many years of service. Maintenance and ongoing use is dependent on adequate, reliable access to water. This was not observed to be a problem in the communities visited during the evaluation, although the evaluation was conducted during the wet season when water is more readily available. CLTS has had inconsistent results from a sustainability perspective in Cambodia. While several key stakeholders interviewed during the evaluation maintained that CLTS produced strong motivations to end open defecation that lead to high coverage levels, there have been reports of significant reversion to open defecation when dry pit latrines collapsed due to rotting of materials or flooding during the wet seasons.<sup>80</sup>

## 5.2 Suppliers

During the Expansion Phase, the *Hands-Off* approach supported the development of 174 competent, robust suppliers who have added sanitation products to their existing offerings. These businesses report that selling high-quality sanitation products has enhanced their reputation within the market place, building their profile as trustworthy, efficient suppliers. The few suppliers interviewed for the evaluation all intend to continue selling latrines for the foreseeable future. They reported a profit of approximately \$10 per latrine sale and that this was sufficient incentive to continue selling latrines. While most suppliers now track their sales, in response to bookkeeping and order tracking training provided by WaterSHED, data on profitability is not readily available. This is not unusual in the context of small /medium enterprises, and even where it is available businesses are often unwilling to report it.

The Evaluation Team notes that sustainability of supply should be defined as ensuring that consumers have ongoing access to businesses that supply high quality sanitation goods and services. Most suppliers, and WaterSHED itself, should be prepared for their sales to increase, peak and then decline as a degree of market saturation—perhaps 70-80%—is reached in their area. What is sustained, however, is the capacity to meet market demand at a lower level, accommodating the needs of new households and catering for repairs and latrine replacement. Because WaterSHED purposefully targets existing construction business—that are now adding latrine construction to their inventory—in theory suppliers should continue to operate even as demand falls. This builds a strong element of sustainability into the WaterSHED model. Consideration is warranted of two factors that are likely to constrain sales for existing suppliers: market saturation in the immediate vicinity of their businesses, forcing businesses to move into less favourable, less profitable areas; and a reliance upon WaterSHED to manage their marketing.

**Serving remote and low income households.** Almost all suppliers interviewed reported growing sales. While the *Hands-Off* program has achieved high levels of coverage in most villages, the 10-20%

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<sup>80</sup> Kunthy and Cantalla (2009) *Community-Led Total Sanitation (CLTS) in Cambodia: A formative evaluation report*. This evaluation of UNICEF supported CLTS activities in rural Cambodia found slippage rates back to open defecation as high as 58%.

who remain without a latrine are the most difficult to reach, either due to a lack of motivation or a lack of financial means. Suppliers in Anlong Vil and Ta Pon communes in Battambang and in Prey Vihear commune in Kampong Speu confirmed that the poorest households had difficulty affording latrines. Several suppliers also reported that some of their newer sales were in more remote villages where transport can be difficult and more expensive. The cost to the businesses of supplying these markets is unlikely to be uniform. It would be worth WaterSHED exploring with suppliers different pricing structures for different communities to ensure consistent profitability as suppliers move to serve the harder-to-reach communities.

**Marketing within the *Hands-Off* Approach.** WaterSHED's *Hands-Off* approach aims to maximise sustainability by supporting the development of a self-sustaining market (including demand creation and connecting suppliers with consumers), rather than by undertaking key sanitation marketing roles itself. WaterSHED staff are meant to train, coach, mentor and support suppliers, key persons and other boundary partners such as government authorities and MFIs. This has been purposefully designed with a view to gradual withdrawal from the sector, leaving behind a functioning market where suppliers provide products requested and desired by informed consumers, with Key Persons, MFIs and government playing ongoing linking, supporting and managing roles.

This approach differs to some extent from iDE, the other major sanitation marketing agency operating in the rural sanitation sector in Cambodia. iDE reported that their prime objective is maximising sales in its target areas and they are prepared to play a more direct role in marketing to achieve that. WaterSHED's approach is more geared to creating a self-sustaining sanitation market that can operate without direct WaterSHED involvement. Since the Key Persons engaged in the *Hands-Off* program live in their target villages and communes—and are often village or commune leaders who are motivated not just by commissions paid by suppliers but also a desire to see their community develop—there is a strong element of sustainability built into KP selection and capacity building.

Suppliers interviewed during the evaluation recognised the marketing role played by WaterSHED. They noted that while they were happy to continue to provide Key Persons with commissions, they recognised that most of their marketing was actually being undertaken by WaterSHED FSs and that while WaterSHED continued to do this they had no intention to invest in their own marketing. One supplier, from Reang Kasei commune in Battambang province, interviewed during the evaluation said that they intended to directly employ a full time sales agent to see to what extent that might boost sales, demonstrating the potential for SPs to manage their own marketing if required. In contrast to marketing, sanitation businesses reported investing in plant and equipment. All suppliers interviewed indicated that they had invested significant funds into purchasing moulds and trucks and tractors (to undertake deliveries) as well as employing more staff to make latrine products.

While the theory of WaterSHED's *Hands-Off* approach is clear, the evaluation found that in reality some of the key sanitation marketing processes are actually undertaken directly by WaterSHED staff. In particular, FSs were found to be undertaking many of the most important promotional activities, especially organising sales events and undertaking door-to-door sales. Initially, these promotional activities were undertaken by independent sales agents contracted by SPs in a relationship facilitated by WaterSHED. Over time, however, WaterSHED observed that its frontline Facilitation Specialists were taking an increasingly active role in promotions. These staff eventually led many of the direct promotional activities, taking more control in an effort to bolster their sales results.

This drift from the *Hands-Off* approach was acknowledged during the Reflection and Synthesis meetings with senior WaterSHED staff, as well as relayed to the evaluation team during meetings

with provincial WaterSHED staff and by all KPs met. Many KPs interviewed told the evaluation team that while they were trained by WaterSHED they didn't feel confident enough to facilitate sales events by themselves. With door-to-door sales, KPs said that this was more effective when undertaken by the FSs in collaboration with the KPs. This meant that the KPs are currently playing a somewhat passive role.

A key question is then why this may be the case. During the synthesis workshop this issue was raised and a number of potential reasons were discussed. Firstly it may be that the Expansion Phase of the program, by setting relatively high sale targets, may have inadvertently steered WaterSHED into prioritising reaching sales targets at the expense of adhering to the *Hands-Off* philosophy. In addition, incentive-based payments to field staff may have reinforced the priority placed on reaching sales targets. WaterSHED indicated that targets were set high to encourage FS's to use indirect channels, instead of leading sales activities themselves, but in practice this may not have produced the desired result. Secondly it may be that frontline staff, especially the Facilitation Specialists (FSs) do not fully understand the *Hands-Off* philosophy or methodology and are not aware that their role should be training, coaching and mentoring KPs and suppliers rather than directly undertaking marketing.

Senior WaterSHED staff reported that they believe staff induction and orientation processes, are fit for purpose. From a sustainability perspective, however, the evaluation team concluded that new sales of latrines were unlikely to continue at the same rate if WaterSHED staff stopped running sales events and door-to-door sales. The current situation has the effect of masking and possibly inhibiting any investments that suppliers may make towards achieving sustainability of their marketing activities. This remains an important area for WaterSHED to monitor.

### 5.3 Government

While the major relationship in the *Hands-Off* program is between consumers and private enterprise suppliers, there is an important role for government in sector policy, planning, monitoring and overall leadership. The government's National Strategic Plan for Rural Water Supply and Hygiene 2014-25 clearly articulates the leadership role of MRD at national and provincial level but also that of the Ministry of Interior at district and commune levels.<sup>81</sup> The district government and commune councils are important for operationalizing sanitation policies as the government's overall plan of 'Decentralization and Deconcentration' is rolled out over future years. The government is in the process of developing a National Action Plan, scheduled to be finalised in late 2015, that will guide implementation of the National Strategic Plan.

The evaluation team met with PDRD, District government authorities (including DORD) and Commune Councils in both Battambang and Kampong Speu provinces, and also held interviews with MRD and Ministry of Interior representatives at the national level. Information gathered during the meetings indicated that rural development departments at provincial level seemed well aware of the National Strategy and were reasonably well attuned to the current issues in the sector and how they might be addressed. At district level there was good awareness within DORD but less so within district administration and commune councils there was found to be less clarity, perhaps because of the wider brief these authorities have, including responsibility for roads, electricity, water and education. Sanitation may be a lesser priority for commune councils, as reflected in the level of

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<sup>81</sup> Royal Government of Cambodia (2014) *National Strategy Plan for RWSSH 2014-2025*

resourcing and human capacity allocated. Feedback received during the evaluation team meetings with commune councils indicated that the Civic Champions program, initiated and supported by WaterSHED, had had the effect of galvanizing both commitment and capacity of commune councillors to become active in promoting and monitoring sanitation coverage in their communes. The Civic Champions program involves providing leadership training to a selected group of mainly commune councillors (with some district and provincial government representatives), who then apply their newly developed skills to the sanitation needs of households within their communes. An evaluation of the pilot program in Kampong Speu conducted in 2014 found that latrine sales had increased by as much as 400% following involvement in the Civic Champions program.<sup>82</sup>

From a sustainability perspective, the evaluation suggests that the government has made significant progress at the national and provincial level but that further resources and human capacity development is needed at district and commune level if government is to play the leadership role required. The expansion of the Civic Champions leadership program could be an important ingredient in enhancing sustainability of the government's role in the sanitation sector. WaterSHED is yet to trial exiting from target areas and hence the extent to which government will take over WaterSHED's activities, and which of these activities are most important, remains unknown.

## 6 Scalability

WaterSHED has been operating sanitation marketing activities in Cambodia since 2009, defining its Pilot Phase as 2009-11, in which it undertook formative research, product development and in general road testing the *Hands-Off* model. The Expansion Phase 2012-14 is the focus of this evaluation and while it still involved some 'honing' of the model, expanded the scale of the program to eight provinces and targeted approximately 100,000 latrines (later revised down to 79,453). WaterSHED has termed the next period the Consolidation Phase (2015-17). It aims to foster the adoption of 130,000 additional latrines and will focus on driving deeper market penetration (especially through addressing gaps such as a low cost shelter and child sanitation options), with the ultimate objective of moving towards exiting the market.

The evaluation identified three issues that WaterSHED may wish to consider as it defines the optimal scale for its program during the Consolidation Phase: (i) whether and how to reach the poorest households; (ii) meeting sanitation needs in challenging environments; and (iii) how the WaterSHED model might be applied outside direct intervention by WaterSHED.

WaterSHED's response to these—and other issues related to the strategic direction of its program—would be usefully addressed through the development of a 3-5 year Strategic or Business Plan.

### Reaching the poorest households

While the evaluation found that the *Hands-Off* methodology significantly increased village sanitation coverage, 100% coverage was difficult to achieve.

Interviews with senior government stakeholders during the evaluation revealed that the CLTS philosophy of ending open defecation for whole communities—including the poorest households—held primacy within MRD and that sanitation marketing was more often seen as enabling households to access improved sanitation products after demand had been raised. As noted in the Development Impact section, the *Hands-Off* approach has tended to result in suppliers selling latrines to ID1 and

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<sup>82</sup> Ann. S. (2014) Cultivating Civic Champions: Evaluating leadership capacity development among elected, local-level government representatives in rural Cambodia

ID2 Poor households at a lower rate than other households. A number of stakeholders remarked on this issue, which they believe is consistent with international views that sanitation marketing by itself generally will not achieve 100% community coverage because some of the poorest households find it difficult to afford or prioritise purchasing a latrine.

The evaluation found that WaterSHED has honed its *Hands-Off* model to better enable consumers, including poorer households, to purchase a latrine. This includes facilitating access to MFI loans, encouraging suppliers to offer payment by instalments, research into more affordable shelters, and piloting of a small trial to provide subsidies to poor households.

Although many of the barriers to latrine purchases have and are being addressed WaterSHED, the *Hands-Off* approach by itself has not been designed to deliver 100% coverage in communities. High coverage levels (80-100%) were achieved in 429 communities in WaterSHED-supported programs as part of the Expansion Phase. However, WaterSHED recognises that other mechanisms such as vouchers/subsidies for some of the poorest households are likely to be needed to achieve 100% coverage at a national level. Interviews with some other WASH sector actors (such as MRD, UNICEF, SNV and WaterAid) confirmed that prioritisation of the poorest households forms an important component of their philosophies and policies. The Consultants believe that this has implications for the scalability of WaterSHED's *Hands-Off* approach. To achieve a national scale up WaterSHED may need to demonstrate how 100% coverage can be achieved and what role the *Hands-Off* approach plays in achieving that result. This could involve WaterSHED either incorporating some other methodologies (which best enable the poorest households to own and use latrines) within the *Hands-Off* approach, or WaterSHED could form partnerships and alliances with other organisations, resulting in a "complete" approach that is the most efficient methodology for reaching 100% coverage.

#### Challenging environments

At present sanitation marketing programs are operating in 15 of Cambodia's 25 provinces, covering 90% of the rural population.<sup>83</sup> While sanitation products and services are available to a great majority of the rural population, the more remote north eastern provinces are currently not covered. These areas are more sparsely populated and may not have the same level of market development as other, more densely populated provinces. The same is likely to be the case even in the 15 provinces where sanitation marketing programs operate—the most remote communities may not be well-served by commercial markets. In addition, interviews with key stakeholders revealed that the current latrine models offered by the main sanitation marketing agencies are not well suited to a significant number of households living in areas with high water tables and/or subject to regular flooding.<sup>84</sup> Several sector actors expressed the view that alternative latrine models suited to these areas are needed in the market. WaterSHED has supported some research to address this issue, but finding affordable solutions has so far been problematic.

WaterSHED may want to consider trialling some variations of its current low-cost latrine core and marketing approaches to meet the sanitation needs of communities in these challenging areas. This might require further product development to deal with situation of high water table and constant flooding and alternate marketing and delivery mechanisms for remote, sparsely populated areas. Alternatively, WaterSHED could very legitimately confine its operation to the eight current provinces,

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<sup>83</sup> Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia*. The four key agencies with significant sanitation marketing programs are WaterSHED ( 8 provinces), iDE (7 provinces), SNV and the WTO (1 province each),

<sup>84</sup> These issues are also raised and discussed in Dalberg (2015) *Review of Sanitation Marketing Approaches in Cambodia*

covering 40% of the rural population, where its current *Hands-Off* approach has already proven to be highly effectively.

Expanding the *Hands-Off* approach to other actors

Demand-led rural sanitation methodologies were introduced into Cambodia in the mid to late 2000s, CLTS in 2006 and sanitation marketing in 2009. Both methodologies have since been ‘road tested’ and implemented at scale by a number of development agencies. Both now feature strongly in the Cambodian government’s National Strategic Plan for Rural Water Supply, Sanitation and Hygiene. The evaluation affirms that WaterSHED’s *Hands-Off* approach is highly successful. Ultimately, the Cambodian government, as the primary duty bearer, is responsible for all households achieving improved sanitation. As WaterSHED looks to the consolidation phase, one question it faces is whether WaterSHED will be the only agency to apply the *Hands-Off* model or whether it will be picked up by other sanitation actors.

As a result of the evaluation, the Lead Consultant is of the opinion that while sanitation marketing forms part of the sector’s overall approach, on its own it will not delivery universal access to improved sanitation for rural households in Cambodia. Significant challenges need to be overcome with respect to accessing financing, reducing the cost of shelters and subsidising access for the poorest households. WaterSHED has been working on these issues. For example, WaterSHED ran a small subsidy trial in 2014 and is continuing to work on refining and improving access to loan financing through VisionFund, and plans to bring a low-cost shelter to market in 2016. However WaterSHED could look to form closer partnerships—or more closely integrate its programs—with other actors, particularly those implementing CLTS. As outlined above, the aim of such a partnership would be to develop a ‘complete’ model that has the ability to routinely produce 100% sanitation coverage in rural communities. Discussions with senior government stakeholders suggest that advocacy for such a model at national level would certainly be well-regarded by government.

Several of the sector actors implementing CLTS are acutely aware of the need to link CLTS demand creation with sanitation marketing. They reported being receptive both to partnership with sanitation marketing agencies and to learning how to carry out marketing approaches within their own programs. WaterSHED has facilitated a considerable amount of sanitation marketing education with WASH sector actors both within Cambodia and internationally, including hosting a three day international workshop in 2013 and making available some of its training materials on SanMark websites (such as [www.sanitationmarketing.com](http://www.sanitationmarketing.com)). As part of the Consolidation Phase, however, WaterSHED may wish to consider specifically packaging the *Hands-Off* approach so that it can be picked up directly by other agencies and hence amplify WaterSHED’s influence in the sector. The current extent of documentation (manuals, training guides, etc.) inhibit this occurring.

## 7 Risks

The evaluation identified four principal risks to the ongoing success of the WaterSHED program and to WaterSHED’s ability to influence other stakeholders working in the sanitation space. These relate to reaching the poorest households, credibility of the ‘hands-off’ element of the approach; pit emptying services and the continual threat of subsidies.

**Reaching the poorest households.** The challenges confronting the *Hands-Off* approach in ensuring that the poorest quintile of households purchase and install latrines were detailed in Section 6. Whilst links to MFIs have improved the situation in some areas, even when finance is available the poorest households are reluctant to borrow for sanitation. The associated risk is that this will diminish government support for WaterSHED’s approach, since universal coverage and ODF

communities are not achieved. It also risks a large and vulnerable portion of the population remaining without access to improved sanitation in the areas where WaterSHED works. As discussed above, WaterSHED is working to address this risk by: continuing research and development on lower cost products; making finance more attractive and available to the poorest households; and by intensifying its engagement with other actors to address the needs of the poorest quintile of households. There remains some confusion amongst other agencies working in the sector about WaterSHED's approach to this issue and WaterSHED could work more purposefully to communicate its strategy to the sector.

**Credibility of the 'hands-off' element.** Discussions with provincial level stakeholders suggest that WaterSHED FS staff carry out much of the role anticipated for key persons. Incentives to meet sales volume targets provide a strong incentive to do this. Not only is this a risk for sustainability but it constitutes a significant reputational risk for WaterSHED, with the potential to undermine WaterSHED's influence in the sector amongst other actors and the government. Where the model works as intended—and WaterSHED is indeed 'hands-off'—it is a highly efficient approach. Suggestions to address this issue are detailed in Section 9.4 and involve both re-orienting program delivery to focus on the model as originally designed and also piloting an exit in some districts to demonstrate how the *Hands-Off* approach can deliver self-sustained, intervention-free latrine sales. Collecting the evidence from these changes will ensure that the hands-off rhetoric is matched by the rigour of the program.

**Environmental hazards from unsafe pit emptying.** As other reports have indicated, the evaluation also found that many latrines constructed during the expansion phase are likely to fill up within a few years. In most of the areas visited a commercial emptying service was not available and where there was a service, households felt that the cost was prohibitive. Householders consulted during the evaluation were not aware of the health risk of emptying pit contents back into the environment without waiting the prescribed two years for pathogens to die off. Participants in the evaluation FGD reported that people empty pits in a range of ways, including direct application to agriculture fields, dumping elsewhere in the environment and burial. In the absence of commercial services and with poor knowledge, there is a strong risk that many of the 100,000 households with a WaterSHED-supported toilet will endanger the environment and the health of community members by inappropriately emptying the contents of the pit.

One potential response to this risk is encouraging SPs to sell second pits to households who have bought a toilet, to provide a twin pit toilet construction that allows safe composting of excreta (as suggested in Section 3.2). WaterSHED should also ensure that purchasers are given information about typical pit filling rates when they purchase their latrines and about safe handling and disposal of pit contents. In addition to KP having this knowledge, WaterSHED could ensure that community health workers are also aware of health issues associated with unsafe pit emptying and advocate within their communities for safe practices.

**Poorly targeted subsidies.** While the government's policy prioritises no-hardware-subsidy approaches, some agencies are still providing subsidies to all households in their project areas. WaterSHED was one of the key agencies encouraging the government to formulate a non-subsidy or 'last-resort' subsidy policy for hardware. Some households reported delaying purchase of their latrines while awaiting hardware subsidies. The evaluation found this to be the case in some of the villages visited that were close to where an ADB project had been providing subsidies to most households. The ongoing presence of hardware subsidies risks undermining WaterSHED's market-

based approach, masking genuine household demand and removing the commercial incentives for suppliers to operate as businesses.

## 8 Capacity Building

### Private sector

In keeping with its market focus, WaterSHED's prime target for capacity building has been the private sector. This extends to two actors—suppliers and key persons. In the expansion phase, WaterSHED has built the capacity of 174 suppliers to construct and market latrine packages. As noted in Section 4.2, these are existing entrepreneurs who have already demonstrated their capacity to operate a business, and for whom WaterSHED's support has opened a new market. Training and support is provided to suppliers, especially in the construction of the core package components, how to track orders, deliveries and costs, how to reach out to KPs, and how to use standard marketing materials.

Suppliers interviewed during the field visits expressed satisfaction with the training and mentoring support WaterSHED had provided them. Many said the rings and chamber box design were superior to that of their competitors and they were confident that they were producing good quality products that met consumers' needs. While WaterSHED facilitated supplier workshops that included exercises on marketing and sales, feedback from WaterSHED staff during the evaluation indicated that most suppliers are generally passive in this area and content to let WaterSHED FSs manage the marketing program for them. If WaterSHED anticipates suppliers taking over this role when it exits a district/province, then targeted capacity building, perhaps concentrating on mentoring support may be required. The substantial rollout of the Civic Champions program during the Consolidation Phase should assist with marketing as local authorities become more involved in sanitation promotion.

Whilst KPs are paid and managed by SPs, WaterSHED is largely responsible for building their capacity. This involves on-the-job training and mentoring to teach KPs how to run sales events and carry out door-to-door sales promotion. A total of 335 KPs were trained during the Expansion Phase. WaterSHED equips KPs with materials for sales events (notably banners and posters) and brochures to hand out to consumers to promote sales.

The quality of KP training is reliant upon the skills, experience and motivation of individual FSs. While almost all key persons told the evaluation team they had had training in how to run sales events and how to do door to door promotion, some KPs felt they still lacked either the confidence or the skills to successfully undertake these tasks without WaterSHED staff being present. WaterSHED may wish to invest in this area by developing a standard training package for KPs that is applied consistently across all provinces and to consider other ways of building KP capacity.

### Other partners

WaterSHED has also carried out capacity building of VisionFund staff to promote the core latrine package as part of its overall marketing of micro-finance loans. The evaluation did not undertake a detailed analysis of the relationship between WaterSHED and VisionFund but interviews with VisionFund staff in both Battambang and Kampong Speu revealed that VisionFund staff often hand out WaterSHED's core latrine brochure and propose latrine loans when they visit villages. VisionFund staff in both provinces said that further training or refresher training would increase their skills and confidence to promote latrine sales and that they would value regular coordination meetings with WaterSHED staff. The capacity of the micro-finance sector generally to support latrine sales would warrant further exploration, to address the issues described in Section 4.1.

## Government

The final report to the Stone Family Foundation describes the input provided by WaterSHED to support government at national level, including input into the development of the National Strategic Plan for Rural Water Supply and Hygiene 2014-25.<sup>85</sup> Interviews with key stakeholders including MRD, UNICEF and WSP acknowledged the very constructive and consistent role played by WaterSHED within sector policy, planning and thinking around significant issues. In addition to supporting development of the National Rural WASH Strategy, WaterSHED is currently contributing to develop the associated National Rural WASH Action Plan. Similarly, WaterSHED has played an active role at the provincial level, promoting provincial sector working groups under the direction of Ministry of Rural Development. A good example of WaterSHED's work to engage and support government leadership was the recent extensive survey of latrine coverage in WaterSHED program areas in eight provinces.<sup>86</sup> This was a joint activity by WaterSHED and MRD carried out in each of the eight program provinces and focusing on data in target districts. Data was collected by village chiefs, involved Commune Councils as well as District and Provincial authorities thus strengthening their M&E capacity. MRD, MoI and PDRD officials interviewed as part the evaluation expressed their appreciation of WaterSHED's support during the latrine survey, but also for their active engagement in the rural WASH sector in general.

Arguably the strongest capacity development contribution the program has made at the government level is through the Civic Champions leadership program (described in Section 5.3). This was piloted in Kampong Speu and is now being rolled out to all eight provinces where the *Hands-Off* program has been operating. Commune councillors are invited to apply and if accepted into the program are required to pay a course fee, currently \$45.<sup>87</sup> This fee does not cover the full cost of the course but is considered important to ensure participants are committed to the program and have a stake in the outcome. The course uses iterative methods centred on 'discover, develop, deliver' rather than the more usual didactic approach and the 2014 evaluation found that participating commune councillors felt they had developed a 'better sense of their leadership roles'.<sup>88</sup> Whilst developing their leadership capacity participants were encouraged through an integrated job assignment to apply their new capabilities to improve the sanitation situation in their communes.

During the *Hands-Off* evaluation discussions were held with two commune councils in Kampong Speu which had had participants in the Civic Champions program. These councillors appreciated the leadership program and found it stimulating. They had established and were implementing plans to increase sanitation coverage in their communes, including setting targets, as well as making village visits to both encourage latrine building and monitor progress. Overall, the Civic Champions program was found to be welcomed and effective in assisting sub-national government representatives to develop their individual capacities, resulting in increased effectiveness and latrine sales.

The evaluation found that sub-national levels of government, in particular at district and commune level, required considerable additional resourcing and capacity development, and while the Civic

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<sup>85</sup> WaterSHED, (2012-14) *Stone Family Foundation project proposal, 6 monthly, annual & final reports (period Jan 2012 – Dec 2014)*. Royal Government of Cambodia, (2014) National Strategic Plan for Rural Water Supply, Sanitation and Hygiene, 2014-2025

<sup>86</sup> WaterSHED (2015) *A Survey on Basic Water and Sanitation facilities in Eight Target Provinces of WaterSHED in Cambodia*

<sup>87</sup> The fee for the pilot program was \$30 but has been increased to \$45 for the next phase.

<sup>88</sup> Ann. S. (2014) *Cultivating Civic Champions: Evaluating leadership capacity development among elected, local-level government representatives in rural Cambodia*

Champions program is contributing to a certain degree, more capacity building is required. This is especially so at district level and with commune councils, so that a critical mass of trained officials can drive sanitation uptake both on the scale required and on a long term, sustainable basis.

While MRD is responsible for rural sanitation at national and provincial level, the Ministry of Interior (Mol) has responsibility at district, commune and village level as it has jurisdiction over local government administration. It is therefore important that adequate attention is given to capacity building within the Mol, especially as it is responsible for a large number of sectors, such as roads, water supply, education, health and security, and as a consequence rural sanitation may not receive priority attention.

#### WaterSHED

As an organisation WaterSHED is well-respected within the sector and recognised for its capacity to deliver high-quality WASH programs and its innovative, market-based approaches. To enhance that reputation, the evaluation suggests that WaterSHED should complement its vision and mission statements with a program strategy—that describes where WaterSHED will target its resources and how its programs fit together—and a multi-year business plan. The business plan, to be reviewed annually, would document in detail the targets, resources and activities that fall under the *Hands-Off* program. The business plan is particularly important because there is no ‘program design’ or other up-to-date document that prescribes what WaterSHED is aiming to deliver.

The evaluation raised some questions regarding human resource management. WaterSHED invests significant resources in staff capacity. To deliver the program the training and mentoring of staff represents a considerable capacity development outcome from the program. Managing a staff of this size is not without challenges and the evaluation touched on two areas that WaterSHED may wish to address.

The first is a high turn-over of field staff, an issue raised informally by WaterSHED staff during the evaluation. The evaluation team was told that there were often significant time gaps between WaterSHED staff leaving and new appointments being made and that the new staff took some time to become effective. High staff turnover was mentioned in several interviews and meetings (including with government, suppliers, key persons, village chiefs and MFI representatives) as a factor that they believed had affected the effectiveness and credibility of the *Hands-Off* program. This issue may be due to a number of factors, including remuneration, workload, management and opportunities for promotion. Retaining staff is central to building organisational capacity and this issue is worthy of further investigation by WaterSHED senior management. This may involve reviewing: recruitment, induction and orientation processes; salaries structure; and management of incentive payments, to reduce the impetus to focus on sales targets rather than implementing the *Hands-Off* approach according to its design.

The second issue with respect to staff capacity is training. At the time of the evaluation, no documentation was available that described the process for training field staff in their role, particularly facilitation specialists.<sup>89</sup> This task is assigned to Area Managers but without documentation guiding the training—or to guide the facilitation specialists when they are new to the job—there is a considerable scope for variation across provinces and amongst staff members about how they perform their role. This may be a contributing factor for Facilitation Specialists directly

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<sup>89</sup> Training documentation, including employee orientation documents and videos, has been formalized since the evaluation was completed.

carrying out marketing activities rather than supporting or mentoring Key Persons to carry out that role. Having an operational manual or guide, linked to a staff training package, would also provide a framework for staff performance management, giving all parties an agreed expectation of roles and responsibilities.

## 9 Lessons and recommendations

The evaluation affirmed that WaterSHED's *Hands-Off* sanitation marketing approach is a highly effective method for assisting rural people in Cambodia to access improved sanitation. During the Expansion Phase the program's activities enabled 79,453 households to build latrines. This represents an overall percentage increase of sanitation uptake of 14.2 %, which is 10.3% greater than the background increase due to economic development. The average program cost of \$22.50 per latrine is very cost-effective compared with data available for other similar programs. The evaluation generated a number of lessons learned. These are set out below, grouped by stakeholder, along with recommendations for consideration by WaterSHED.

It should be noted that these recommendations are directed at strengthening ongoing program activities. In no way do these recommendations diminish the overall success of the current program.

### 9.1 Consumers

**Reaching the poorest households remains challenging.** The *Hands-Off* approach is not currently well-suited to securing sanitation access for the poorest households. Whilst the core latrine package is modestly priced at \$50, households are typically spending \$300-500 on the latrine shelters, so the cost to households for the toilets that WaterSHED is promoting is effectively \$350-550. The prototype low-cost shelter being developed by WaterSHED is expected to cost at least \$150 which will bring down the overall cost significantly but remain three times the cost of the core latrine package. While households aspire to purchase shelters that cost this much, any savings on the core latrine components are of minor value and it is considered likely that cost will remain a barrier to poor households accessing latrines via sanitation marketing. Microfinance loans (discussed below) offer a partial solution to this issue but finance does not appear likely to address the needs of the poorest households. WaterSHED has undertaken some limited experimentation with subsidies and is in a position to play a guiding role in the sector for developing subsidy mechanisms that do not undermine market-based approaches.

#### Recommendations:

1. Collect and analyse data about the extent to which ID1 households are purchasing latrines under the *Hands-Off* model and under what circumstances.
2. Form partnerships with other sector actors to trial a subsidy mechanism in communities where there is already high sanitation coverage and that builds upon the learning from WaterSHED's previous pilot.

**Engagement with MFIs needs to be delivered consistently across the program.** The relationship with VisionFund in Battambang demonstrates the potential for sanitation finance to be offered within existing MFI programs and to improve the reach of WaterSHED's program into those market segments where finance is a barrier. It would appear that MFIs, however, are not yet convinced that sanitation is a good fit for their loan products or a priority area for expansion. Current offering of finance seems reliant on individual relationships and the perception amongst loan officers that sanitation is a social good. There is an opportunity to build on the current examples of very successful cooperation, such as in Battambang, and replicate the relationship with other MFIs as

necessary, and create program-wide access to micro-finance loans. The experience with micro-finance during the Expansion Phase suggests that the very poorest households will not take out (or be offered) loans for sanitation and hence the potential impact of MFIs on access for the poor should not be overstated. WaterSHED's has outlined its intention to continue to work on streamlining and enhancing the effectiveness of loan processes during the Consolidation Phase of the Hands-Off program.

Recommendation:

3. Building upon current experience, formalise the relationship with VisionFund and offer micro-finance loans consistently in all areas where VisionFund operates; and replicate the model with other MFIs where possible.

**Delayed installation is considered essentially a non-issue.** Concerns were raised in previous reporting about the delay for some households between purchasing latrine core package and building their latrine. WaterSHED has sought to counter this problem by encouraging suppliers to offer an installation service and included this as one of their targets for the Extension Phase. The evaluation suggests that the barrier for installation is meeting the cost of the superstructure rather than securing the services of an installation contractor. Where the installation option has been offered by suppliers, they report that the take-up by consumers has been low. The RCSAS evaluation found that almost all latrines are installed within 18 months. On this basis, the evaluation suggests that there is no need for WaterSHED to focus further resources on this issue.

**Hygiene and sanitation behaviour change.** The *Hands-Off* program has been successful in facilitating a large number of households to gain access to sanitation, enabling improved hygiene behaviour. Having an improved toilet is fundamental to households being able to practice health-inducing hygiene behaviours. As illustrated by poor disposal of infant faeces, having a latrine has been very effective in changing defecation behaviour for adults and children but often does not improve disposal of infant faeces or lead to improved hand washing practice. Further product development by WaterSHED on infant potties and reusable nappies, along with hand washing stations, is outlined for the Consolidation Phase of the *Hands-Off* program, including attention to behaviour change messaging. WaterSHED's ongoing relationships with other agencies working on WASH related behaviours changes could be important in extending and refining national messaging regarding infant and babies' faeces disposal.

Recommendation:

4. Bring new products to market for infant and babies faeces; develop behaviour change messages and marketing materials specific to these new products; and continue to partner with agencies that specialise in behaviour change.

**Proactive planning is required for pits that are filling fast.** WaterSHED's success in promoting toilet sales will result in more than 100,000 latrine pits, many of which are likely to become full in the near future. Consumers are not aware of the health dangers in emptying their pit contents directly onto agricultural areas. This is a serious risk for consumers and also a reputational risk for WaterSHED. While it is beyond the capacity of WaterSHED to solve this issue entirely, the agency should make a conscious effort to address it, including providing advice on safe pit emptying (burial) on the brochure that SPs are encouraged to use and including this in a training guide for Facilitation Specialists and Sales Agents. WaterSHED could also encourage suppliers to take advantage of filling pits as an opportunity to sell a second set of concrete rings. Consumers could then construct double off-set pit latrines and safely compost faecal matter before reusing it.

Recommendation:

5. Plan and implement a formal response to encourage safe pit emptying by consumers.

## 9.2 WASH Enterprises/Suppliers

WaterSHED-supported suppliers are currently selling latrines and making a profit. Market saturation for the core product is a desired end point and sales for successful suppliers will consequently fall considerably. Whilst not yet reported by WaterSHED as happening, this trajectory should be expected. Unless suppliers are to move further and further afield to make sales, then over a few years the market for successful suppliers may diminish. The long-term prospect for these suppliers is selling a much lower volume of toilets to new households or where latrines need replacing. The potential long-term sales rate has not been quantified. Suppliers, however, are satisfied that involvement in the *Hands-Off* program is building their business generally and deepening their relationships with customers.

Support should be considered for non-WaterSHED suppliers. The context in Cambodia has changed considerably since sanitation marketing was first being introduced. Programs now operate in 15 of 25 provinces and there are now many small enterprises who are convinced of the profitability of selling toilets. Whereas the *Hands-Off* program was designed in an initial context of few or no businesses selling toilets to rural consumers, copy-cat firms are now springing up around WaterSHED's success. How WaterSHED will respond to this change in context is unclear. It could involve both extending support more broadly in target districts to more/all suppliers selling sanitation products; and being clearer about when suppliers will 'graduate' from WaterSHED support, to minimise the risk that some suppliers become reliant on WaterSHED support and are advantaged over other firms in the market. Since WaterSHED treats their technology improvements as 'open source', they could actively encourage all suppliers to adopt the WaterSHED core package.

Recommendations:

6. During the consolidation phase, trial in some communes working with all suppliers who are interested.
7. Clarify the package of support that suppliers will receive from WaterSHED and clearly identify the point at which suppliers should be 'graduated' from WaterSHED support.

More attention needs to be paid to building the capacity of sales agents. Although KPs had received training from WaterSHED, some didn't feel confident that they had the skills or the capacity to convince households to purchase and build a latrine, especially after a relatively high level of coverage had been achieved in their village following the initial waves of sales. WaterSHED does not appear to have adequately documented how FSs are to train and mentor KPs, detailing the processes to be used and the obligations for each party. To ensure a consistent approach WaterSHED should develop a training guide for FSs to use, and consider an associated guide for KPs to use. Allied to this issue is the extent to which FSs are taking on the role of KPs and running marketing activities on their behalf. This issue, along with better management of FSs (Recommendation 15), would also help address the quality of KP capacity development.

Recommendation:

8. WaterSHED should document the training and mentoring program that FSs are required to deliver to KPs and ensure that the processes and obligations are clearly set out.

### 9.3 Enabling environment

The Civic Champions leadership program makes a significant contribution to government capacity at commune level. WaterSHED's Civic Champions leadership program had a very positive effect on both the confidence and skill levels of participating commune councillors. Its rollout to the eight *Hands-Off* provinces is likely to further advance sub national government's effectiveness and strengthen sustainability of sanitation outcomes. There is a limit to what WaterSHED should take on with respect to building government's capacity to plan, promote and monitor sanitation improvements. Currently only a limited number of councillors attend leadership program. Where expansion is possible, district level government participation should be encouraged, since this level is arguably the least engaged level of government from a sanitation perspective. This would also help the program engage more strongly with the Ministry of Interior (responsible for a range of issues at district and commune levels, including sanitation).

Articulating an aspiration and strategy for scaling up is considered important. Sanitation marketing programs are now operating in 15 of Cambodia's 25 provinces, encompassing 90% of the rural population. The concept of 'scaling up' needs to be understood in this context. The Cambodian Government views sanitation marketing as a part of the solution to achieving universal rural sanitation coverage. Their focus is on ensuring whole communities become open defecation free, which is unlikely to be achieved with a market-based approach alone. This perception of the role of sanitation marketing was found to be shared within the sector generally. On this basis, it is unlikely that the *Hands-Off* approach will be picked up by government or other sector actors and promoted as a stand-alone intervention. There is, however, great scope for the *Hands-Off* approach to be the premier sanitation marketing method. Many agencies working in the sector, including those pursuing CLTS, recognise the importance of sanitation marketing to enable households to access durable, high-quality sanitation. There is general acknowledgment and appreciation within the sector of the key role WaterSHED has played in the development of national policies and practices. WaterSHED has also made considerable efforts to work collaboratively with other agencies, including those using CLTS and subsidy programs. This places WaterSHED in an excellent position to further develop the integration of sanitation marketing, CLTS and subsidies, with the objective of establishing an overarching methodology to achieve 100% coverage in communities.

#### Recommendations:

9. WaterSHED should define its aspiration for scaling up of the *Hands-Off* approach within the sector and develop a strategy to pursue that aspiration.
10. The *Hands-Off* approach should be packaged in a way that maximises the potential use by other agencies, including documented guidelines and training materials.
11. Seek out partners in the sector, particularly agencies implementing CLTS, and purposefully integrate the *Hands-Off* approach into a broad sanitation intervention.

The *Hands-Off* approach may not be well-suited to some challenging environments in Cambodia. Several of the north eastern provinces are not currently covered by sanitation marketing programs. These tend to be more remote than other provinces with relatively low population densities. Consequently, there are fewer existing suppliers and less developed market conditions compared to the areas where WaterSHED currently works. Locations subject to frequent flooding or high water tables also present a challenge to use of the *Hands-Off* core latrine package. Therefore there is a compelling argument for WaterSHED to direct its resources to applying the *Hands-Off* model where it works best—and hence to having the greatest impact on sanitation with the resources at its disposal. Alternatively, WaterSHED may choose to continue innovation and product development to address

the specific needs of these challenging environments. This decision is an example of the issues that should be addressed in an overall strategy for the program.

#### 9.4 WaterSHED, organisation and operation

WaterSHED may benefit from developing an overall strategy and business plan. The evaluation was hampered to some extent by the lack of a current document describing what WaterSHED is implementing under the *Hands-Off* program. The reference document for the evaluation concerning the program design became the original proposal to the Stone Family Foundation. This document, however, was out of date in a number of respects, since the program had evolved since the proposal was prepared (for example it refers to four target provinces rather than eight). While the evaluation was in process WaterSHED was finalising its plan for the *Hands-Off* program for the next three years (2015-17), referred to as the Consolidation Phase. This document provides a good overview of the directions WaterSHED believes the *Hands-Off* program needs to follow, the issues to be addressed and how they will be addressed. It is nonetheless recommend that WaterSHED develop a strategy and an annual, rolling 3-5 year business plan for the whole organisation. This strategy and plan would help to give effect to the WaterSHED vision and mission statements and articulate where each of WaterSHED's programs fit together—including the Consolidation Phase of the *Hands-Off* program. The business plan would ensure all programs align with the organisation's priorities, provide a framework against to which to manage implementation, and assist staff to understand how their activities fit within the broader organisational goals.

##### Recommendation:

12. WaterSHED should consider developing a strategy and multi-year business plan, to complement their vision and mission statements.

WaterSHED should ensure the *Hands-Off* approach becomes more 'hands-off' than is currently being practiced. WaterSHED works to stimulate other players in the sector to respond to consumer demand, principally businesses but also government. The evaluation highlighted that WaterSHED staff are playing a much more hands-on role than articulated in the *Hands-Off* approach. In particular, most sales events and door-to-door sales are being conducted by Facilitation Specialists with the KPs playing supporting roles. There are also insufficient indications that suppliers will take over management of the KPs and fill the gap when WaterSHED withdraws its support. These practices present a marked departure from the basic concept of the *Hands-Off* model. While the evaluation explored some of the potential issues for this occurrence, further and detailed investigation is warranted by WaterSHED internally to understand why the departure from the envisaged approach has occurred. Once the issue is understood, WaterSHED could address this aspect of the program during the Consolidation Phase with a three-part strategy: (i) withdraw from several districts, across several provinces, in a conscious trial of an exit strategy; (ii) intensely manage a 'pure' *Hands-Off* approach in several districts in each province, that demonstrates how the approach should work when managed as intended; and (iii) steadily move all other districts to the envisaged *Hands-Off* approach by improving staff training and management, using the 'pure' districts as demonstration sites.

##### Recommendations:

13. Identify why staff have drifted into playing a more hands-on role than intended by the *Hands-Off* model.

14. Apply a three-part strategy to restore hands-off implementation involving exiting some districts; intense management in others; and a steady re-orientation in the remaining program districts.

Strengthening human resource management within WaterSHED. While the evaluation was focused on the outcomes and impact of the *Hands-Off* program, a range of stakeholders—including WaterSHED staff themselves—noted the frequency of staff turnover within WaterSHED provincial offices. This is problematic from a capacity building perspective and may also be related to the gradual drift into direct implementation by WaterSHED staff rather than facilitation. Analysis of the causes for this turnover is required before instituting measures to address it. In addition to a broad HR review that covers staff induction, orientation, remuneration and accountabilities, two other human resource issues should be highlighted. Firstly, there is a concern that the financial incentives paid to facilitation staff, which have a strong sales target basis, create a perverse incentive to directly implement rather than facilitate and capacity build. Secondly, it would appear that training and orientation of new staff, particularly FSs, need to be strengthened and that plus greater attention could be given to management and mentoring of field staff.

Recommendation:

15. Review internal WaterSHED human resource management with a view to reducing staff turnover and improving induction, training and management.

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## Annexes

## Annex A: Evaluation Scope of Work

## Annex B: Evaluation Plan

## Annex C: List of Key Stakeholders Meetings

The following is a list of the key national stakeholders interviewed as part of the evaluation

Name	Position
Dr Chea Samnang	Director of Cabinet-Office of Council of Ministers, Royal Government of Cambodia
Chreay Pom	Director of Department of Rural Health Care, Ministry of Rural Development
Chhun Hieng	Deputy Director- Department of Municipality & Provincial Support, Ministry of Interior
Susanna Smets	Senior Water and Sanitation Specialist- WSP, Cambodia
Belinda Abraham	(former) Chief of WASH – UNICEF, Cambodia
Michel Dauguet	Director of WASH Program- iDE, Cambodia
Petra Rautavuoma	WASH Sector Leader- SNV, Cambodia
Rafael Cantalla	Program Manager (Global Sanitation Fund)- Plan international, Cambodia
Hang Hybunna	WASH Specialist - Plan International, Cambodia
James Wicken	Country Representative-WaterAid Cambodia

## WaterSHED staff involved in the evaluation

Name	Position	Evaluation role
Janita Bartell	Social Behaviour & Research Specialist	Core team member
Ung Rattanak	Head of Business Intelligence Unit	Core team member
Horn Sokchanlida	Area Manager, Kampong Cham	Core team member
Ren Phally	Senior Facilitator Specialist, Battambang	Core team member
Nguon Leappeak	Area Manager, Battambang	Battambang team member
Hourt Srey Mum	Senior Facilitator Specialist, Pailin	Battambang team member
Sam Chanra	Facilitation Specialist, Battambang	Battambang team member
Man Phalla	Area Manager, Kampong Speu	Kampong Speu team member
Pok Vandeth	Area Manager, Takeo	Kampong Speu team member
Son Dypong	Area Manager, Kampong Chhnang	Kampong Speu team member
Touch Sakada	Facilitation Specialist, Kampong Speu	Kampong Speu team member
Kam Udom	Facilitation Specialist, Kampong Speu	Kampong Speu team member
Khem Vichet	Facilitation Specialist, Kampong Speu	Kampong Speu team member
Chhuom Rey	Facilitation Specialist, Kampong Speu	Kampong Speu team member

## Annex D: WaterSHED Core Latrine Brochure