
VERIFICATION OF SANITATION OUTCOMES IN VIETNAM AND CAMBODIA THROUGH THE CHOBA PROJECT

Final Report

Ann Larson and Jessie Connell

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SOCIAL DIMENSIONS



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The Bill and Melinda Gates Foundation

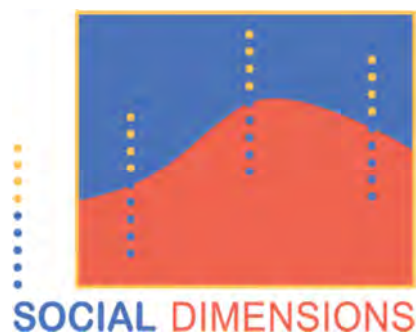
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Photos by Ann Larson

Social Dimensions

PO Box 2429
Geraldton WA 6531
Australia

Phone: +61 (0)8 9965 3015
ABN: 38849688220



Summary

Introduction

In 2012 The Bill and Melinda Gates Foundation funded East Meets West Foundation to implement a 44 month rural sanitation project known as Community Hygiene Output-Based Aid (CHOBA) in Vietnam and Cambodia. The aim was to accelerate household ownership of hygienic latrines through the use of an output-based approach.

Grant payment was contingent on achieving targets. Incentives, in the form of rebates or discounts, were given to poor families who purchased and installed a latrine. Implementing partners who worked with local governments to promote latrine ownership and manage the rebates were also paid based on the numbers of latrines installed, as were village promoters who went door to door promoting latrine ownership and providing advice on how to purchase and install the latrine and obtained loans.

To encourage latrine ownership in households that were not poor, communes that increased their household latrine ownership rate by more than 30 percent were eligible for a conditional cash transfer (CCT) to the Commune Council.

To be eligible for the incentives the latrine must have been correctly installed to meet standards specific to each country. The latrines must have been constructed during the CHOBA period in households which previously did not have a hygienic latrine. To qualify for a rebate the household had to also be in one of two officially designated poor classifications or a third category reflecting low economic status although not officially poor.

Independent verification is critical to output based approaches in order to guarantee transparency and accountability.

East Meets West developed a comprehensive monitoring system to internally verify the claims. All households in participating communes were registered prior to the start of the program. The register, entered electronically, included household identity, latrine status and economic status. When that the implementing partners claimed that a household had installed a hygienic latrine, their eligibility was checked on the register. At least 30 percent of claimed latrines were also verified in person by an East Meets West verification officer.

Methods

The independent verification reported here verifies what the East Meets West team has already verified and has claimed meets their criteria.

The independent verification had a similar design in each country. Two provinces were selected purposively to demonstrate different aspects of program implementation. The independent verification teams were given the complete list of latrines verified by East Meets West. Two samples were created. One was of poor households which meet the criteria for a rebate (OBA sample). The second sample was of non poor households who had built a hygienic latrine during CHOBA in communes who achieved an increased rate of latrine ownership (CCT sample). The total number of

independently verified latrines was 1075. In each country there were approximately 350 OBA latrines and 180 CCT latrines independently verified. The samples were selected through a three stage cluster sample of selecting districts proportionate to the total number of verified latrines, then randomly selecting participating communes and randomly selecting verified households within the communes.

All data collection teams had a two-day training before participating in a one-day pre-test in the field and a final day of revision training in preparation for data collection. The East Meets West teams were fully engaged in providing advice on the design of the independent verification, commenting on the instruments used, and supporting the training and pre-test.

Commune Councilors, Village Chiefs and, in Vietnam, commune and village level Women's Union representative were interviewed about the benefits, successful strategies and difficulties of CHOBA.

Findings

The independent verification found a very high percentage of eligible latrines in the OBA and CCT samples in both countries. In Cambodia the ineligibility rate was less than one percent for the OBA sample and less than two percent for the CCT sample. In Vietnam the ineligibility rate in the OBA sample was under one percent and in the CCT sample was four percent.

In Cambodia, a sanitation supply chain involving local businesses that made and installed latrines, had reduced the cost and inconvenience of installing a latrine. The poor and the non-poor purchased the same type of pour-flush off-set latrine, replacing a practice of defecating in fields or simple pit latrines. Only the shelter around the latrine differed by economic status. About 30 percent of the poor households did not construct walls around their latrine and very few of these were actually used. Handwashing facilities with soap or detergent are still not universally available, even in the non-poor households.

In Vietnam most households already had a latrine, although it was often very simple or very inconvenient. Even through CHOBA most households who wanted a latrine needed to source supply and arrange for construction. Almost all of the latrines were inside or adjacent to the house and had bathing facilities or a bathroom attached. The costs, especially in the northern province, were much higher than in Cambodia.

Overall, the very poorest families were the least likely to participate in CHOBA. In some places the Commune Councils or implementing partners supported some of the poorest households by contributing to the costs of purchasing or installing the latrines.

Community informants recognised many benefits in CHOBA for their community and were able to describe a number of ways they had been involved in promoting ownership as well as challenges.

Conclusions

CHOBA had a rigorous internal verification process. This independent verification found a very low percentage of verified and approved latrines that that did not meet the eligibility criteria.

The program has been successful in accelerating household ownership of hygienic latrines and has demonstrated that output based approaches, when applied at multiple levels, can result in effective initiatives to promote ownership among poor and non-poor households.

Acknowledgements

The authors would like to express their sincere appreciation to the EMW teams working on CHOBA in both Vietnam and Cambodia. Both EMW teams were unfailingly cheerful and helpful, and at all times eager to describe their project and supportive of the independent verification exercise.

The contribution of the local research firms, Indochina Research Ltd, Cambodia and Indochina Research Ltd, Vietnam cannot be overstated. Both firms, working independently, provided their local knowledge and expertise and demonstrated a willingness to be flexible and accommodate the requirements of this project.

Contents

1	Introduction.....	1
1.1	The CHOBA program.....	1
1.2	The CHOBA monitoring and evaluation system.....	2
1.3	Purpose of the independent verification	3
2	Methods	4
2.1	Developing the design	4
2.2	Additional data collected	10
2.3	Limitations.....	10
3	Findings.....	11
3.1	Cambodia.....	11
3.2	Vietnam.....	16
4	Observations	21
4.1	EMW monitoring and verification processes	21
4.2	Outputs based approach.....	22
4.3	Targeting poor households	23
4.4	Improved sanitation and hygiene.....	23
4.5	Lessons learned concerning independent verification	26
5	Conclusion	26

List of Tables

Table 1:	Sample design for independent verification of CHOBA, Vietnam and Cambodia.....	6
Table 2:	Summary of information used to independently verify claimed latrines	8
Table 3:	Results of independent verification of latrines claimed through CHOBA.....	12
Table 4:	Distribution of households by economic status, in the CHOBA baseline and the independent verification sample, Prey Veng and Pursat provinces	13
Table 5:	Material and other aspects of latrine infrastructure, verified households, Cambodia	13
Table 6:	Costs of construction by economic status.....	14
Table 7:	Numbers of respondents along the sanitation ladder, verified households, Cambodia.....	14
Table 8:	Results of independent verification of latrines claimed through CHOBA.....	16
Table 9:	Distribution of households by economic status, in the CHOBA baseline and the independent verification sample, Hai Duong and Tra Vinh provinces	17
Table 10:	Materials and other aspects of latrine infrastructure, verified households, Vietnam.....	18
Table 11:	Percentage of householders reporting taking a loan from a financial institution to pay for latrine construction, Vietnam.....	19
Table 12:	Median cost of latrine	19
Table 13:	Costs of building a latrine, based on the extensiveness of the construction project, mean, range and median in USD.....	20
Table 14:	Numbers of respondents along the sanitation ladder, verified households, Vietnam, N=518.....	20

Table 15: Number of community informants by position, Vietnam.....	21
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List of Figures

Figure 1: A simplified model of CHOBA verification process.....	2
Figure 2: Comparison of the economic status of poor households in the baseline and independent verification samples, Hai Duong and Tra Vinh provinces.....	18
Figure 3: Randomly selected verified latrines from Vietnam and Cambodia, illustrating different construction styles.....	25

Acronyms and abbreviations

BMGF	The Bill and Melinda Gates Foundation
CCT	Conditional cash transfer
CHOBA	Community Hygiene Output-Based Aid project
EMW	East Meets West Foundation
M&E	Monitoring and Evaluation
MICs	Multiple Indicator Cluster survey
OBA	Output-based approach
PDRD	Provincial Department of Rural Development
RACHA	Reproductive and Child Health Alliance
USD	United States Dollar

1 Introduction

1.1 The CHOBA program

The Bill and Melinda Gates Foundation’s (BMGF) Water, Sanitation & Hygiene strategy focuses on developing effective, sustainable and scalable ways to assist people who lack access to adequate sanitation. As part of this strategy, BMGF funded the East Meets West Foundation (EMW) to implement a rural sanitation project in Vietnam and Cambodia, known as Community Hygiene Output-Based Aid (CHOBA), a 44-month project operating from mid-2012 to mid-2016. The project began promoting latrines in mid-2012 in Vietnam and mid 2013 in Cambodia. The program has met its targets and is in its final stages. In both countries, it has informed second generation projects, which are currently underway. The purpose of this verification process is to independently assess the results of CHOBA, as claimed by EMW.

One objective of CHOBA was to demonstrate how output-based aid (OBA) can be used in the sanitation sector to target the poorest 40 percent with “smart subsidies” and reward community level increases in latrine ownership.¹ Under the CHOBA model, EMW authorized incentive payments to poor households as “rebates” after the latrine construction was verified. Communities received a lump-sum conditional cash transfer (CCT) upon achieving community-wide sanitation targets which required that poor and non-poor households increase latrine ownership. The CCT1 target was a 30 percentage point increase in the percentage of households owning a hygienic latrine since the start of CHOBA. CCT2 awarded communes who achieved a higher coverage: 95 percent of all households for communes over 45 percent sanitation coverage before CHOBA or 75 percent in cases where the initial coverage rate was less than 45 percent. EMW also made outcomes-based payments to implementing partners that performed education and communication functions with beneficiaries.

The project aimed to provide direct benefits to some 155,000 poor households in Vietnam and Cambodia, through education and assistance regarding strategies for funding hygienic latrine construction. An additional 189,000 households were expected to receive indirect health and welfare benefits as a result of an increased number of households with latrines; some of these households were expected to construct toilets themselves, without subsidies. EMW worked with government and non-government implementing partners to achieve these outputs.

EMW was responsible for the management of CHOBA, including development of materials, standards for hygienic latrines, and training. On-the-ground operations were conducted by implementing partners, working with local government. Implementing partners had the responsibility of promoting hygienic latrine ownership, especially through the rebate system, and providing EMW with the details of participating households. Some implementing partners also worked with suppliers to facilitate installation, conducted community and household education, and assisted households to apply for loans. Implementing partners and village promoters received

¹ BMGF, Verification of sanitation outcomes in Vietnam and Cambodia: Request for Proposal, December 2014.

an output-based payment after claimed latrines were verified by EMW.

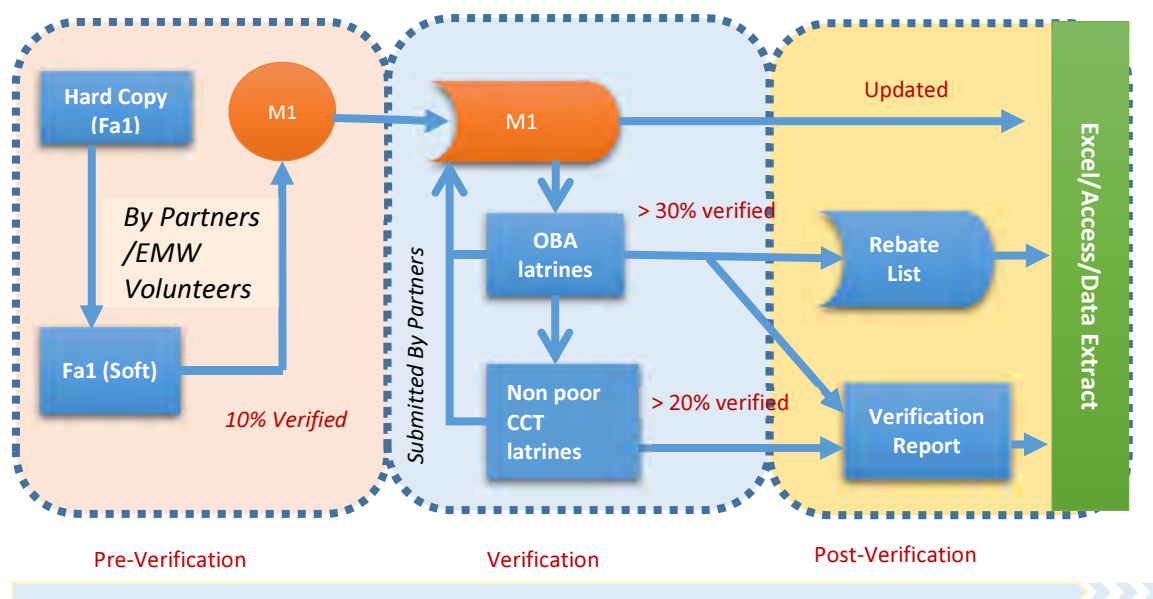
1.2 The CHOBA monitoring and evaluation system

EMW created a monitoring and evaluation (M&E) system to support CHOBA’s implementation and to measure outputs. A broader aim of CHOBA was to create a ‘culture of monitoring’ in the sanitation sector.

The system had input or pre-verification, verification and post-verification phases, as illustrated in Figure 1.

When CHOBA was launched in a participating commune, implementing partners worked with Commune Councils to list the household information, poverty status and latrine status of each household. These lists were verified by EMW staff and, if necessary, re-done. They were then entered into an electronic database and served as the primary evidence of eligibility and a baseline of household latrine ownership

Figure 1: A simplified model of CHOBA verification process



Notes: Modified from a diagram produced by EMW Cambodia. Fa1: EMW form recording household identities, economic status, and latrine status. Data in M1 is used to update the Access database

After an implementing partner motivated a poor household to construct a hygienic latrine, the household’s name would then be submitted to EMW to verify its eligibility. Once constructed, the implementing partner would submit a list of household latrines to claim the household rebates, incentive payments for promoters and for their own organization. EMW would check the input dataset to confirm eligibility and then send the list of eligible claimed households (and those whose eligibility was queried based on the input database) to their own verifiers based in the relevant provinces. These verifiers (one staff member per province in Vietnam and teams of student volunteers in Cambodia) were responsible for physically checking the identity, poverty status and

latrine construction of at least 30 percent of claimed OBA households. The verification data and rebate list were entered electronically.

When a commune was ready to claim a CCT for achieving community-wide sanitation, the implementing partners together with the relevant Commune Council would prepare a list of non-poor households that had up-graded to hygienic latrines since the start of CHOBA. Names of households that now shared a hygienic latrine with another household when previously they did not use a latrine or used an unhygienic latrine were also submitted. These names were checked against the input dataset and then sent to the EMW verifiers. At least 20 percent of the listed households needed to be physically verified before the CCT payment could be approved. The actual proportion of latrines verified by EMW was higher in Vietnam, in part because of difference in how the input data was originally collected.

A rejection rate of more than 10 percent of the claimed latrines from the OBA and CCT households resulted in rebates and incentive payments not being authorized and the commune being removed from the CHOBA program. Rejection rates during verification varied between the two countries, different locations within each country, and between OBA and CCT latrines. From the beginning of the program to February 2015, the rejection rate of verified latrines for the OBA rebate ranged from 0 to 24 percent, during a period where new communes were introduced. The average monthly rejection rates were eight percent in Vietnam and less than one percent in Cambodia.²

This report is an independent verification of the latrines that were already directly verified and considered eligible by EMW.

1.3 Purpose of the independent verification

The goal of the independent verification exercise is to provide an external check on the CHOBA sanitation outcomes claimed by EMW in Vietnam and Cambodia.

Independent verification is critical to the output-based approach. BMGF and EMW were eager to verify sanitation outcomes in a cost effective way that did not duplicate EMW's existing monitoring and evaluation activities.

Because EMW already has in place an internal verification system, Social Dimensions collaborated with EMW country teams to develop a methodology to verify the sanitation outcomes they have reported, using EMW's definitions and verification methods. The independent verification exercise re-visited randomly selected households and communities to verify hygienic latrine construction and payment.

Two indicators were independently verified:

- Indicator 1: the hygienic latrines constructed as part of CHOBA by households classified as poor and eligible for the rebate as claimed and verified by EMW; and
- Indicator 2: the hygienic latrines constructed by households not eligible for the rebate in communes qualifying for CCT1 or CCT2 as claimed and verified by EMW.

² Data supplied by EMW.

2 Methods

2.1 Developing the design

The design of the independent verification was the same in Vietnam and Cambodia. In each country there were three samples. One consisted of households eligible for a CHOBA rebate and who had installed a latrine that had been verified by the EMW team (OBA sample). The second sample was drawn from non-poor households in communes that had received a CCT and verified by EMW as having upgraded to a hygienic latrine since the start of CHOBA (CCT sample). The third sample was of key informants at the commune and village level who provided information on the local context (Community sample).

The design and conduct of the independent verification were facilitated by several trips to Vietnam and Cambodia, which included visits to the selected provinces.

Ann Larson visited Cambodia between 7-10 April. The EMW team explained the program and verification process and accompanied her for two days in Prey Veng to meet with representatives of the implementing partner, the Provincial Department of Rural Development (PDRD), two Commune Councils and several Village Chiefs. She observed the EMW verification process, talked with a number of poor and non-poor households about their latrines and interviewed members of EMW's verification team. She also met a local supplier of hygienic latrines who manufactured, transported and installed latrines across several communes. She gave a presentation on her preliminary thoughts about the independent verification designed and received constructive feedback.

Ann Larson and Jessie Connell visited Vietnam between 13-17 April. The EMW team provided them with a detailed briefing about project implementation, achievements and monitoring and verification processes. With EMW team members, they spent one day in Ninh Binh province, meeting with representatives of the provincial, district and commune Women's Union, local government, several village promoters and local stone masons. They observed EMW's verification process in action, observing a number of installed latrines, and spoke with the Project Assistant responsible for verification in the province. They gave a presentation detailing the proposed verification process and received feedback that was incorporated in the protocol. During interviewer training, Ann Larson accompanied the local research firm, EMW staff and local partners to observe the pre-test in Hai Duong in North Vietnam.

After data collection, Ann Larson visited Tra Vinh province in southern Vietnam with the CHOBA program director and members of the local research firm that conducted the independent verification in Vietnam. She met with provincial Women's Union officials, local masons, a Commune Council, Village Chiefs and Women's Union village promoters. She also interviewed senior officials from the provincial Department of Health. In addition she inspected nine households that had been visited as part of the independent verification; in some cases there was a question about their eligibility what was resolved during the visit.

In Cambodia, Ann Larson visited Pursat province during the questionnaire development and interviewer training. With EMW staff she met with representatives of Reproductive and Child

Health Alliance (RACHA) (a local NGO and implementing partner in Pursat), a Commune Council, several village chiefs and a local supplier, observed latrines constructed under CHOBA and talked to householders.

Extensive notes were taken during the provincial field trips and insights have been incorporated into the descriptions of CHOBA and in the observations arising from the independent verification.

2.1.1 Sampling

The independent verification was conducted in two provinces in each country. The provinces were selected purposefully to reflect the range of program experience.

In Vietnam a decision was made in consultation with EMW to select one province in the north and one in the south. The specific provinces of Hai Duong and Tra Vinh were selected by Social Dimensions in consultation with the local research firm. The northern province of Hai Duong had the largest number of households qualifying for the CHOBA rebate: over 13,000 by February 2015 and also one of the higher rejection rates. The southern province of Tra Vinh had 5000 latrines constructed by February 2015 and a very low rejection rate. In both provinces, as in all provinces in Vietnam, the local partner was the Women's Union working with the support of local authorities.

In Cambodia the two provinces were selected in consultation with EMW. About two-thirds of the CHOBA rebate households were in Prey Veng province, where the local implementing partner was the Provincial Department of Regional Development. The second province selected was Pursat. EMW had verified 9052 OBA households in Prey Veng and 811 OBA households in Pursat between May 2013 and April 2015.

The original sampling strategy was to randomly select three districts in each province with the selection rate proportionate to the number of verified and accepted CHOBA rebate households. Within two districts there were to be two CCT communes and one commune that did not qualify for CCT. In the third district there were to be three communes, of which none qualified for CCT. Communes were to be selected by a simple random sample out of the total number of eligible communes in each district. The intention was to minimize travel time between districts and communes and to capture a range of implementation experiences. We hypothesized that communes qualifying for CCT were more proactive and, possibly, more accurate in record keeping.

In practice the sampling had to deviate from the original plan. Districts were still selected proportionate to size. The northern Vietnamese province, Hai Duong, was part of an EMW commissioned randomized control trial of different incentive packages. Therefore we could only select communes that either had the standard CHOBA package or were not part of the RCT. In the southern province only three communes achieved CCT status; one was in a district with no other communes participating in CHOBA. Therefore, in the southern province the sample included two CHOBA rebate communes from a fourth district.

In Cambodia, almost two-thirds of all latrines eligible for the CHOBA rebate and all of the CCT communes were in Prey Veng. Furthermore, many of the Pursat OBA communes had fewer than 30 verified households. The independent verification design involved nine OBA communes and six CCT communes in Prey Veng, and only two OBA communes in Pursat.

The final sample design is shown in Table 1. The total number of households independently verified was 1075.

Table 1: Sample design for independent verification of CHOBA, Vietnam and Cambodia

District	Commune	Sample type		Sample size		District	Commune	Sample type		Sample size		Totals
		OBA	CCT	OBA	CCT			OBA	CCT	OBA	CCT	
Tra Vinh (Southern Vietnam)						Hai Duong (Northern Vietnam)						
A	1	Y	N	20		A	1	Y	Y	19	30	
	2	Y	Y	19	30		2	Y	Y	19	30	
	3	Y	Y	19	30		3	Y	N	20		
B	1	Y	Y	20	30	B	1	Y	Y	19	30	
C	1	Y	N	19			2	Y	N	20		
	2	Y	N	20			3	Y	N	20		
D	1	Y	N	19		C	1	Y	N	19		
	2	Y	N	19			2	Y	N	19		
	3	Y	N	20			3	Y	N	20		
Total				175	90	Total				175	90	530
Prey Veng (Cambodia)						Pursat (Cambodia)						
A	1	Yes	No	32		A	1	Yes	No	32		
	2	Yes	No	32			2	Yes	No	32		
	3	Yes	No	32								
B	1	Yes	Yes	32								
	2	Yes	Yes	32								
	3	Yes	Yes	32	32							
C	1	Yes	No	32	32							
	2	Yes	No	33	32							
	3	Yes	Yes	32	32							
D	1	No	Yes		32							
	2	No	Yes		32							
Total				289	192	Total				64		545

Households were randomly sampled from the list of verified households provided by EMW. Households were selected throughout the commune and not clustered by villages. A reserve list of additional randomly selected households was also created.

In both countries, interviews were conducted with key informants at the community and village level. These were people with whom the field staff interacted in order to seek permission and to locate households. The interviews were held with either representatives of the implementing partner or local authorities. In total, 99 interviews took place.

2.1.2 Verification strategy

For a latrine to be independently verified, it needed to meet four criteria:

- It was the same household as described in the EMW datasets.
- The household had the appropriate poverty status (OBA sample only.)

- The household had improved their sanitation status by upgrading from an unhygienic to a hygienic latrine.
- The latrine was constructed during the CHOBA period.

There were some challenges that arose in conducting the independent verification. Where possible a consistent approach was used to address the challenges. However, the definitions of poverty status and hygienic latrines were different in Vietnam and Cambodia, reflecting different official policies and procedures. These required country-specific strategies for independent verification.

The decisions described below concerning the definition of an “eligible household” were made in consultation with the EMW M&E advisor during the development of questionnaires, training, data collection and analysis, as issues arose.

2.1.2.1 General strategies

The date of latrine construction was not directly recorded on the EMW electronic datasets in either country. In a few cases, in both countries, the householder reported to the independent verifier that they constructed the latrine after the date of the EMW verification date or payment authorisation. These latrines may have been under construction or materials were purchased when EMW verified them; under those circumstances the latrines should not have been approved. However, it was considered possible that the householder had undertaken additional construction work, such as finishing the walls, or had merely made a mistake about the date. In these circumstances, if the latrine met the other eligibility criteria, they were accepted.

In all cases the latrines had been installed and were working during the independent verification. Correct installation and functioning was tested by pouring water, or flushing water, into the pan, except for double-vaulted composting latrines in Vietnam.

Specific considerations for verifying latrines in Cambodia and Vietnam are described below.

2.1.2.2 Cambodia

Cambodia’s CHOBA program had three poverty statuses. ID Poor 1 and ID Poor 2 are official designations. On a rotating cycle of approximately every three years, households’ poverty status is assessed and identification cards issued to eligible families. For CHOBA, EMW also used a third category called economic hardship or Poor 3. The implementing partner was responsible for determining if a household qualified as experiencing economic hardship, based on a checklist derived from the Ministry of Planning’s tool. The checklist considers household composition (age of household head, number of children, disabled members), economic status (numbers of workers, size of land or business), and assets (housing quality, household items).

The independent verification team administered the checklist for households that were designated as Poor 3. The status of households claiming to be (or recorded in EMW records as) ID Poor 1 or Poor 2 but could not show their card was verified from lists held by commune or village officials. Householders listed as Poor 3 whose score indicated that they were not poor were asked about recent changes in economic or household status that might explain why they had been classified as Poor 3. These cases were also confirmed with local officials.

Most latrines installed during CHOBA in Cambodia had the same underground works. They were single-pit water pour-flush latrines, built either on-set, or much more commonly, off-set. The only significant differences seen in the field were between dry and wet cement construction.

2.1.2.3 Vietnam

Vietnamese households in one of three poverty statuses were eligible for the rebate: Poor, Near Poor and Economic Hardship. The Poor and Near Poor lists are compiled at the end of each calendar year for the next year. The Economic Hardship lists were compiled for CHOBA by the commune officials; by agreement it could include no more than 20 percent of all households in the commune. The independent verification teams checked every sampled household against the lists held at the commune offices.

Some households may not have been on a poor list in the year of construction but they were counted as eligible for a rebate if they had been on a poor list at the beginning of CHOBA or any time after CHOBA began. In practice this meant that the supervisor of the data collection team searched for each household on the OBA sample on the earliest list used by CHOBA (usually 2012). If the household was not listed in that year, subsequent years were checked. When the household was found, the supervisor recorded the year of the book, page and line entry. Changes in types of poor status, for example, transitioning from the poor to the near poor list, did not affect eligibility.

In Vietnam, hygienic latrines had to conform to the National Government standards. EMW defined this to mean that the following types were eligible: 1) three compartment septic tanks, 2) double-vaulted composting latrines, and 3) sealed bio-gas latrines. Households up-grading from a double-vault composting latrine to a latrine with septic tank were considered eligible. Households up-grading from a two-compartment to a three-compartment septic tank were not eligible. In a few cases where this issue arose it was not always possible to be certain about the type of latrine that had existed previously.

2.1.3 Data collection for independent verification

The independent verification is a three stage process involving 1) independent data collection through interviews, structured observation and photographs, 2) comparison with EMW records, and 3) resolution, if possible, of any discrepancies through other documentation and discussion with local authorities. A summary of the sources of information used to confirm eligibility is in Table 2.

Table 2: Summary of information used to independently verify claimed latrines

Source of information	Household identity	Economic status	Hygienic latrine	Construction date
East Meets West forms				
Input data base (F1a)	✓	✓	✓	
Electronic verification record (F11)	✓	✓	✓	
Household package (Vietnam)			✓	✓
Government forms				
Household registration form	✓			
Lists of poor households held by communes		✓		
ID Poor cards (Cambodia)		✓		
Additional				
Household interview	✓	✓	✓	✓
Poor 3 checklist (Cambodia)		✓		
Photographs			✓	
Testing latrine				
Confirmation with village chief or commune official	✓	✓		✓
Loan agreements (Vietnam)				✓
Other informants	✓	✓		✓

2.1.3.1 Data collection in Vietnam

In Vietnam, there were two fieldwork teams: one for the northern province and one for the southern province. Each team had a manager, supervisor and four interviewers. Both managers had previous experience as quality control officers. Although it was very hot and dry in North Vietnam and rainy in Southern Vietnam during field work, the conditions did not significantly affect data collection.

In Vietnam, questionnaires were printed for each selected household. These had prepopulated fields with the household name, type of latrine constructed during CHOBA, type of latrine owned previously and poverty status. The interviewers would ask householders questions, record the answers and check for consistencies with the prepopulated fields and information from “household packages” obtained from the provincial Women’s Union.³ Interviewers took photos of the inside of the latrine, evidence of construction (usually the top seal of the tank or ventilation pipe) and the householder. Supervisors followed up on any discrepancies regarding eligibility criteria, often showing a great deal of ingenuity, such as checking with loan agreements or conferring with the supplier or a neighbour who installed a latrine at the same time.

2.1.3.2 Data collection in Cambodia

Fieldwork was conducted during rainy seasons in Cambodia. One small team collected data in Pursat and two larger teams collected data in Prey Veng. Migration for work to other parts of Cambodia or neighboring countries is very common in parts of the country. Up to 20 percent of selected households had migrated in some communes. Fieldworkers used the reserve list to replace households that were not present.

Cambodian data collection took place after the Vietnam data had been collected. The Vietnamese questionnaire, translated in English, was used as the basis for the Cambodian questionnaire. Household and community questionnaires were printed. Information to be verified from the EMW data set, such as name of householder, poverty status, CHOBA program start date, were manually entered onto the forms prior to the interviews. Interviewers also took photos of the latrine and external construction with a tablet and stored the geocoded location and summary information.

2.1.4 Local key informants

The independent verification required the assistance of Village Chiefs and CHOBA promoters to identify the selected households. These same people played a critical role in implementing CHOBA. In order to capture their knowledge, as well as to gain a better understanding of local context, the interview teams interviewed the commune and village officials who assisted them.

Open-ended, unprompted questions were asked about the benefit of CHOBA, local initiatives to support the project, difficulties in implementing the project and their suggestions for the future. They were also asked closed-end questions about the economic status of their commune or village,

³ The Household Package consisted of a registration form to indicate that the household had agreed to construct a hygienic latrine, a completion form to indicate that it had been completed and a photograph of the completed latrine. These were prepared by a representative of the Women’s Union. Initially EMW volunteers entered this data electronically but since August 2014 the information has not been entered and is only available in hard copy.

the numbers of poor people who could not afford a latrine, recent natural disasters that could have affected latrines and percentage of households in the commune or village that owned a latrine.

Probable responses based on the experience of the IV leader during a scoping mission, discussions with EMW staff and pretesting were pre-coded and interviewers were instructed to write down other answers. The basic structure and the questionnaire was the same in Vietnam and Cambodia, with some adjustments for local context. Pre-coded answers reflected differences in project implementation in the two countries.

2.1.5 Data quality

Strategies to ensure data quality were embedded in all stages of preparation, data collection, data management and data analysis included:

- Selection of experienced local research firms through a competitive process.
- Involvement of EMW M&E team in reviewing draft questionnaires, providing technical training to field staff and participating in the pilot.
- Comparison between aggregated numbers of verified households and household data sets provided by EMW.
- EMW was not told the names of the selected districts or communes before field work started. They provided household data for all verified households in each province for CHOBA rebates and CCT.
- Three days of training for managers, supervisors and interviewers, plus participation in a one day pilot. (In Vietnam the manager and supervisor for the southern province came to Hanoi to participate in the training and piloting. They then ran the training and piloting in the south with support of EMW field staff based in the south).
- Careful review and finalization of the questionnaires following training and piloting.
- Protocol ensured that the randomly selected households were visited a least three times over at least two days before moving on to a household on the reserve list.
- There was a supervisor responsible for reviewing the eligibility of each household and following up on every discrepancy.
- The quality assurance team and the independent consultant scrutinized results from every household and followed up on queries.
- In Tra Vinh, there was the additional opportunity to re-visit several households recorded as ineligible. This resulted in two changes from ineligible to eligible.

2.2 Additional data collected

The main purpose of this exercise was to independently verify that the latrines claimed by EMW met the eligibility criteria. Notwithstanding this focus, the independent verification collected additional information to inform program delivery. These included information on building materials for the shelter around the latrine, the costs to households of building the latrine, methods used to finance construction, latrine usage and availability of water and soap for hand washing.

2.3 Limitations

The provinces were selected purposively and results cannot be generalised to other provinces. However, the two provinces selected in Cambodia comprised over 70 percent of all OBA latrines and

100% of CCT communes.

The independent verification teams needed the assistance of the village chief or an officer from the implementing agency to identify the selected households. Although they were not involved in the selection, it was necessary to inform them a day or two in advance of visiting the selected communes. The teams were instructed not to allow representatives of the implementing partners to participate in the interviews, but there was still potential for them to have influenced the respondents' statements. Household identification, poverty status, construction quality, working condition and latrine use were independently verified. The date of construction was more difficult to independently verify. Households sometimes forgot when they had installed the latrine and asked partners for that information. Interviewers used other methods such as referring to dates on loans, conferring with neighbors and inspecting the facility for signs of age.

In the vast majority of cases it was possible to determine what type of latrine had been constructed, but in some cases the underground tanks and the ventilation pipes were not visible. Interviewers probed householders for detail and, as for all latrines, tested that they worked.

3 Findings

3.1 Cambodia

3.1.1 Sanitation and CHOBA in Cambodia

The World Bank, using estimates from WHO and UNICEF, report that only 42 percent of Cambodians had access to “improved sanitation facilities” in 2015.⁴ CHOBA worked to increase that rate by building on the success of several supply-side programs conducted in Cambodia, which created more efficient supply chains for local businessmen who manufactured and, in many cases, installed, inexpensive hygienic pour-flush latrines. This met a need identified in Cambodia for low cost options for poor households, who were already convinced that they wanted a latrine but were discouraged by the high cost and practical difficulties of sourcing and installing their own.⁵

Through the suppliers already established, CHOBA's OBA rebate of approximately USD 18 was available to eligible poor household installing a latrine that cost, depending on location, between USD 50 and 65. That cost included the supplies and installation of the underground cement rings, slab and pan. Householders were responsible for constructing their own walls and roof, often including bathing facilities.

⁴ World Bank, Improved sanitation facilities (% of population with access)<http://data.worldbank.org/indicator/SH.STA.ACSN> , 2015.

⁵ Water and Sanitation Program, Sanitation Demand and Supply in Cambodia, Field Note, 2008. Available: http://www.wsp.org/sites/wsp.org/files/publications/Sanitation_demand_and_supply_fieldnote_final_1.pdf

The CHOBA program in Cambodia was implemented in four provinces. In Prey Veng the implementing partner was the Provincial Department of Rural Development. CHOBA assisted them to meet government targets to increase individual household latrine ownership as part of the National Social Protection Strategy. The department engaged its provincial and district staff and used its existing relations with Commune Councils to register households, promote latrine ownership and manage the rebates. In Pursat, where the implementing partner was a local NGO, Reproductive and Child Health Alliance (RACHA) which had worked in the province for up to 20 years. They used their existing relations with Commune Councils and their own project staff to promote the program. By the time field work had started, the project had ended in Pursat.

3.1.2 Verification

The percentage of verified latrines determined to be ineligible by the independent verification team was very low (Table 3): less than one percent for the OBA sample and less than two percent for the CCT sample.

Table 3: Results of independent verification of latrines claimed through CHOBA

	Prey Veng	Pursat	Total	%
OBA				
Eligible	293	58	351	99.2%
Ineligible	2	1	3	0.8%
Total	295	59	354	100.0%
CCT				
Eligible	189		189	98.4%
Ineligible	3		3	1.6%
Total	192		192	100.0%

The three ineligible OBA latrines were built by households that had been classified as Poor 3, but scored very low on the checklist and the householders themselves said they were not poor. The three ineligible latrines in the CCT sample had been constructed before the CHOBA period. In two cases the dates were reconfirmed by double checking with the household on the phone during data cleaning.

3.1.3 Characteristics of latrine ownership

3.1.3.1 Economic status

Pursat, is among the poorest provinces in Cambodia.⁶ As Table 4 shows, in the input datasets Pursat had a slightly larger proportion of non-poor households, but among the poor households Pursat had a higher proportion of very poor households.

The OBA samples, drawn from the verified CHOBA latrines, had a higher proportion of Poor 3 households. The poorest households were much less likely to participate in CHOBA, particularly in Pursat.

⁶ Asian Development Bank, Cambodia Country Poverty Analysis 2014. Manila: ADB, 2014.

Table 4: Distribution of households by economic status, in the CHOBA baseline and the independent verification sample, Prey Veng and Pursat provinces

Economic status	Prey Veng			Pursat		
	Input dataset for 3 districts		OBA sample	Input data set		OBA sample
	% of total	% of poor		% of total	% of poor	
ID Poor 1	12%	36%	29%	13%	50%	25%
ID Poor 2	16%	47%	29%	11%	43%	46%
Poor 3	6%	16%	41%	2%	8%	29%
Non poor	66%			74%		
Total	100%	100%	100%	100%	100%	100%
N	71687	24671	293	24294	6305	58

Householders were not asked how they financed their latrines in the independent verification. However, increasing access to loans was one of the strategies used by RACHA in Pursat to increase latrine ownership. The organisation already had a micro-financing scheme set-up for savings groups. For CHOBA they created a new low-interest loan package for poor households. The loan attracted 2 percent interest each month and was to be paid off over one year. It was only available to poor households (including the near poor) and only for the latrine itself, not the shelter or other construction. A loans officer for the NGO said half of the poor families who received a rebate took out a loan. In his view, the inclusion of the near poor was very important as the cost was still prohibitive for the very poor. “Poor 3 households are more likely to buy a latrine. They have more money, more understanding, may have migrated elsewhere and seen latrines. If one household builds a latrine those nearby households would build.”

3.1.3.2 Characteristics of latrines

As Table 5 shows, the latrines constructed through CHOBA were relatively simple. Almost all of them were detached from the main house and only 29 percent of poor households had bathing facilities as part of the structure. In fact, 29 percent of the latrines of poor households had no walls at all. The lack of shelter was not because the latrines had only recently been installed: only 14 of the 102 latrines without walls had been constructed in the previous six months.

Table 5: Material and other aspects of latrine infrastructure, verified households, Cambodia

	OBA Sample		CCT sample	
Latrine separate from house	341	97%	172	91%
Built with a bathroom or bathing facilities	103	29%	149	79%
Has a roof	216	62%	179	95%
Construction material				
No walls	102	29%	8	4%
Concrete with tiled walls	33	9%	47	25%
Concrete or brick with few tiles	61	17%	93	49%
Corrugated iron	62	18%	30	16%
Leaf, cloth or plastic	91	26%	11	6%
All verified households	351		189	

3.1.3.3 Financing latrines

The different types of construction affected the cost of the latrines. Table 6 shows that in Cambodia, the sanitation supply chain meant that most households bought the same, inexpensive off-set latrine for which half of the sample paid \$50 or less. In most cases the costs reported were minus the rebate, as in Prey Veng this was deducted when the household paid for the latrine. The median cost of the whole latrine structure is lower for poor households than the non poor.

Table 6: Costs of construction by economic status

Economic status	Median	Minimum	Maximum	Mean	N
Latrine underground and pad					
ID Poor 1	\$34	\$18	\$68	\$36	90
ID Poor 2	\$33	\$25	\$66	\$36	153
Poor 3	\$33	\$18	\$67	\$34	108
Non poor	\$40	\$20	\$425	\$46	189
Total latrine construction costs					
ID Poor 1	\$45	\$25	\$875	\$140	90
ID Poor 2	\$50	\$30	\$1,500	\$136	153
Poor 3	\$50	\$18	\$692	\$104	108
Non poor	\$263	\$30	\$1,200	\$366	189

As already noted, the non poor were more likely to have more solidly constructed structures which included bathing facilities. Almost 30 per cent of poor households had not constructed any walls.

3.1.3.4 Moving up the sanitation ladder

The CHOBA project has moved many households along the sanitation ladder but there is scope for further behavior change (Table 7). Virtually all non-poor households reported that they regularly use their new latrine and observations by the independent verification team confirmed this. Among poor households, only 70 percent reported using their new latrines regularly. Almost all of the poor households who reported that they did not regularly use their latrine either had no walls around their latrines or walls made of leaf, cloth or plastic. Water for flushing the latrine was not set nearby in 45 percent of cases, casting further doubt on how regularly some households used their latrines.

Table 7: Numbers of respondents along the sanitation ladder, verified households, Cambodia

Reported use	CCT Sample		OBA Sample	
	Count	Percentage	Count	Percentage
Always	184	97%	243	69%
Some of the time	1	1%	29	8%
Rarely	4	2%	79	23%
Observed use				
Yes	184	97%	249	71%
No	5	3%	102	29%
Hygiene facilities				
Water available for flushing or cleaning	182	96%	194	55%
Nearby handwashing facility	140	74%	95	27%
Soap or detergent present	96	51%	58	17%

There is also scope for more promotion of handwashing. Only half of non-poor households and 17 percent of poor households had signs of soap or detergent within 3-4 metres of their latrines.

3.1.4 Community informants' feedback

The independent verification team interviewed 47 local informants, 37 in Prey Veng and 12 in Pursat. Eleven respondents were members of the Commune Council and 36 were Village Chiefs or Deputy Chiefs. All respondents were able to give a rate of household latrine ownership, although almost all of the rates given ended in "0" or "5", suggesting they were reporting estimates. The estimates range from below 50 percent (15 percent of respondents) to over 90 percent (also 15 percent of respondents). The mean estimated rate was 65 percent.

More than half of the respondents said that the most positive benefits of the project for their community was that local people were more aware about sanitation and hygiene (34 respondents), that health had improved (29 respondents) and more people were using hygienic latrines (25 respondents). Less frequently mentioned benefits were the improvements to the local environment (19 respondents), help for poor people to build a latrine (16 respondents) and motivation for non-poor people to build a hygienic latrine (10 respondents).

The local informants credited educational activities (33 respondents), involvement of local authorities (26 respondents) and the implementing agency (25 respondents) with making the program a success. Monetary factors were mentioned as well, with 18 respondents saying that they combined the CHOBA incentives with other funds from other programs and 15 respondents saying that the CHOBA incentives to poor households were important.

Respondents mentioned household visits (41 respondents) and community meetings (32 respondents) as activities that were done in their communities to support latrine ownership. Other factors mentioned that made it more convenient to construct latrines included: the implementing partner or commune ordering the latrines directly for the supplier for the households (25 respondents), assisting households to get loans (15 respondents) and providing financial support in addition to the CHOBA rebate (14 respondents).

More than half of the respondents (25) said that there were other water or sanitation programs operating in their commune or village; usually involving both latrine construction and community education. During preliminary visits to the provinces the consultants were told about projects that would select up to five very poor households to receive a free latrine.

The difficulties in implementing the project included that it was still too expensive for many poor households to invest in latrines (32 respondents), that it took many visits to convince a household to build a latrine (31 respondents), that it took many visits to collect the money owed for installing the latrine (19 respondents) and that householders were not interested (17 respondents). The suggestions were to provide latrines to poor households for free (33 respondents), extend the program so that more households could benefit (18 respondents) and reduce the cost of latrines (18 respondents). A minority of respondents said that the incentives to the communes (15 respondents) or the promoters should be increased (10 respondents). Respondents from Pursat were much more likely to say that they thought incentives should be increased for promoters.

Detailed responses are listed in Annex 1.

3.2 Vietnam

3.2.1 Sanitation and CHOBA in Vietnam

Based on the 2014 Multiple Indicator Cluster survey (MICs) by UNICEF, 76 percent of people in Vietnam have access to improved sanitation.⁷ However, that rate varies considerably between regions and income statuses.

CHOBA was conducted in 10 provinces and 510 communes throughout the country. Approximately half of the participating communes started in mid-to-late 2012 and the remainder in mid-2013.

The Vietnamese Women's Union was EMW's implementing partner. While the essential aspects of the program were the same throughout the country, each province made some operational decisions on their own. These included how the program was promoted in communes and villages, access to loans, arrangements for ordering and paying for latrines, distributing rebates and use of other funds to assist the poorest households.

The two provinces where the independent verification was conducted are distinct in their economic conditions and in aspects of program delivery. Most of the information from the independent verification is presented for each province separately and then as a combined total.

3.2.2 Verification

The percentage of verified latrines found to be ineligible by the independent verification team was very low (Table 8). Less than one percent of the OBA sample was ineligible. Two latrines in Hai Duong were constructed before the CHOBA period. In both cases these were in communes which had a later start date. Two latrines in Tra Vinh had been built by householders who were replacing two-compartment septic tanks with three-compartment septic tanks.

In the CCT sample, four percent of the sample was not considered eligible. Four latrines in Hai Duong and one in Tra Vinh apparently already had a two-compartment septic tank prior to CHOBA and constructed a new latrine during the project period. Two latrines in Tra Vinh were improperly constructed and one had not been constructed although that householder was using a new shared latrine and would have met the criteria of a new shared hygienic latrine.

Table 8: Results of independent verification of latrines claimed through CHOBA

Sample / Eligibility	Hai Duong	Tra Vinh	Total	%
OBA				
Eligible	173	173	347	99.1%
Ineligible	1	2	3	0.9%
Total	175	175	350	100.0%
CCT				
Eligible	86	86	172	95.6%
Ineligible	4	4	8	4.4%
Total	90	90	180	100.0%

⁷ General Statistics Office and UNICEF, Viet Nam Multiple Indicator Cluster Survey 2014, Final Report. Ha Noi, Viet Nam, 2015.

Interviewers were told by more than one Women’s Union representative that it was their practice to encourage up-grading of two-compartment septic tanks. One interviewer noted on the form:

“Old latrine has 2 compartments. This is a septic latrine (qualified). [Women's commune official] say ‘EMW say we should encourage the household whose latrine have 2 compartments to upgrade it into 3 compartments for hygienic standard, so that I campaigned all people who have 2 compartments toilet to build a 3 compartments one.’ ”

The interviewer clarified that the previous latrine used water and was not a double-vaulted composting latrine.

3.2.3 Characteristics of latrine ownership

The two provinces have very different economic conditions which affected the householders who participated in CHOBA, the types of latrines they constructed and how they financed them.

3.2.3.1 Economic status

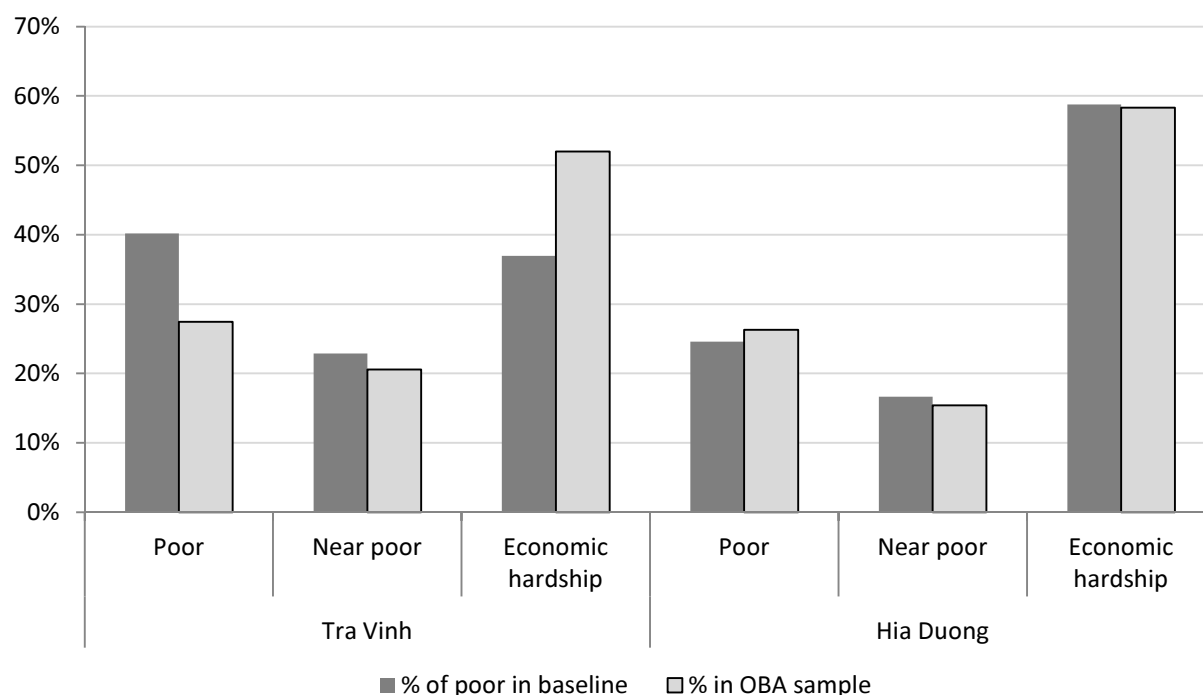
As Table 9 and Figure 2 show, from the information recorded by the Women’s Union and verified by EMW before starting CHOBA, there are more people classified as poor in Tra Vinh than in Hai Duong. The province has a lower proportion of non-poor households and, among the poor, higher proportion in the poorest category.

In Hai Duong, the proportion of the independently verified OBA sample in each of the poor categories was similar to the baseline, suggesting the program involved all levels of poor households equally. In Tra Vinh there was a lower proportion of the poorest households participating and a higher proportion of those classified as being in economic hardship but not “officially” poor.

Table 9: Distribution of households by economic status, in the CHOBA baseline and the independent verification sample, Hai Duong and Tra Vinh provinces

Economic status	Input dataset for province			
	N	% of total	% of poor	% in OBA sample
Hai Duong				
Poor	7589	13%	25%	26%
Near poor	5146	9%	17%	15%
Economic hardship	18144	31%	59%	58%
Non poor	27665	47%		
Total	58544	100%	100%	100%
Tra Vinh				
Poor	17367	24%	40%	27%
Near poor	9891	14%	23%	21%
Economic hardship	15974	22%	37%	52%
Non poor	29389	40%		
Total	72621	100%	100%	100%

Figure 2: Comparison of the economic status of poor households in the baseline and independent verification samples, Hai Duong and Tra Vinh provinces



3.2.3.2 Characteristics of latrines

Simple, detached latrines with impermanent walls were rare in the Vietnamese IV samples, although the construction material tended to be simpler and less expensive in Tra Vinh than in Hai Duong (Table 10).

Table 10: Materials and other aspects of latrine infrastructure, verified households, Vietnam

	Hai Duong			Tra Vinh			Grand total	
	OBA	CCT	Total	OBA	CCT	Total	N	%
Total	173	86	259	173	86	259	518	100%
Bathing facilities								
Includes	165	85	250	156	81	237	487	94%
Does not include	8	1	9	17	5	22	31	6%
Roof								
Yes	173	86	259	166	82	248	505	97%
No				7	4	11	11	2%
Construction material of walls								
Concrete and tiles	40	31	71	85	47	132	203	39%
Concrete or brick and few tiles	133	55	188	38	28	66	254	49%
Corrugated iron or aluminium				5		5	5	1%
Leaf, cloth or plastic				44	11	55	55	11%
Unobservable				1		1	1	0%

3.2.3.3 Financing household latrines

The majority of respondents reported taking out a loan to pay for the latrine (Table 11). In both provinces, households in the economic hardship category were the most likely to take out a loan and the non poor the least likely.

Table 11: Percentage of householders reporting taking a loan from a financial institution to pay for latrine construction, Vietnam

Province / poor status	%	N
Hai Duong	48%	265
Poor	43%	46
Near Poor	52%	27
Economic hardship	60%	102
Non poor (CCT sample)	36%	90
Tra Vinh	70%	265
Poor	69%	48
Near Poor	67%	36
Economic hardship	75%	91
Non poor (CCT sample)	67%	90
Total	59%	530

In Hai Duong, the overall proportion was just under one-half but in Tra Vinh more than two-thirds of Tra Vinh residents from every economic status took out a loan to pay for their latrine construction. Representatives of the provincial Women's Union negotiated with the Bank of Social Development to allow small, low interest loans for households installing latrines. The standard loan was 6 million dong (USD 300). They negotiated for people to be able to take 2 or 4 million dong loans. Loans were for 0.8 percent interest annually to be paid over 3 to 5 years.

Households needed loans because they spent a lot of money on their latrines. The amount of money spent on latrine construction in the north was many times greater than the south. As Table 12 shows, Hai Duong residents reported spending 5 to 10 times more to construct their latrines than residents in Tra Vinh.

The difference in costs can be largely explained by the nature of the construction. In Vietnam and especially in Hai Duong, latrines are elaborate structures, often built inside the house as the house is being built or extended, as shown in Table 13.

Table 12: Median cost of latrine construction, in USD by province and economic status.

Hai Duong total	\$2,250.00
Poor	\$1,000.00
Near Poor	\$2,000.00
Economic hardship	\$1,750.00
Non poor	\$3,500.00
Tra Vinh total	\$300.00
Poor	\$200.00
Near Poor	\$275.00
Economic hardship	\$275.00
Non poor	\$350.00
Total	\$600.00

Table 13: Costs of building a latrine, based on the extensiveness of the construction project, mean, range and median in USD

	Mean	Min	Max	Median	N
Hai Duong	\$6,122	\$250	\$85,000	\$2,250	265
Latrine only	\$643	\$250	\$1,250	\$600	28
Latrine + bathroom	\$1,115	\$300	\$3,500	\$900	89
Latrine + kitchen	\$3,954	\$400	\$11,500	\$3,500	96
Latrine + house	\$22,923	\$2,500	\$85,000	\$25,000	28
Latrine + other construction	\$21,405	\$600	\$60,000	\$10,000	24
Tra Vinh	\$459	\$50	\$17,000	\$300	264
Latrine only	\$217	\$50	\$675	\$200	91
Latrine + bathroom	\$363	\$125	\$1,000	\$325	161
Latrine + kitchen	\$825	\$500	\$1,150	--	2
Latrine + house	\$5,486	\$1,500	\$17,000	\$3,500	7
Latrine + other construction	\$467	\$400	\$500	--	3
Grand Total	\$3,268	\$50	\$85,000	\$600	529

3.2.3.4 Moving up the sanitation ladder

Unlike the findings in Cambodia, virtually all of the latrines verified in Vietnam were being used and there was evidence of water for flushing, handwashing facilities and soap nearby (Table 14).

Table 14: Numbers of respondents along the sanitation ladder, verified households, Vietnam, N=518

Hygienic behaviors and infrastructure	N	%
Has a hygienic latrine installed	518	100%
Latrine is working	515	99%
Latrine is being used regularly according to respondent	515	99%
Latrine appears to be in regular use	514	99%
Water for flushing and personal hygiene	516	100%
Handwashing facility	516	100%
Soap or detergent	486	94%

This may be in part because householders in Vietnam were already accustomed to using some form of latrine. In Hai Duong, 57 percent of householders had been using a simple pit latrine and another 40 percent a double-vaulted composting toilet. In Tra Vinh, 95 percent were using their own or a neighbor's latrine hanging over a fish pond. Exclusive open defecation was virtually unknown.

3.2.4 Community informants' feedback

The independent verification team interviewed 52 local informants. Most were officials or representatives of the Women's Union who were responsible for implementing CHOPA in Vietnam (Table 15).

Table 15: Number of community informants by position, Vietnam

Position	Hai Duong	Tra Vinh	Total
Commune Women's Union	10	9	19
Commune official	2	3	5
Village Women's Union	13	11	24
Village official		4	4
Total	25	27	52

All but one of the respondents was able to give the rate of individual latrine ownership in their commune or village, although heaping on 80 percent and 90 percent suggests that many people gave an estimate rather than an exact figure. Nonetheless, the figures confirm the relatively high rates of latrine ownership, assisted by the CHOBA project. The mean rate reported was 82 percent in Hai Duong and 75 percent in Tra Vinh.

An improvement in the local environment was the most common response about the benefits of CHOBA (45 respondents). Increasing awareness about sanitation and hygiene was mentioned almost as often (42 respondents). More than half of the respondents also said something to the effect that the program helped them to achieve government targets, improve health and increase the use of latrines. Annex 2 lists the detailed responses for this and other open-end questions.

In Hai Duong, the most frequent activity respondents reported doing for the project was promoting latrine ownership in community meetings, whereas in Tra Vinh it was about providing financial support and loans for households. This reflects the greater reliance on loans in Tra Vinh and the involvement of other partners, such as the Department of Public Health, who were involved in sanitation education. Also, in about half of the locations sampled in Tra Vinh, other sanitation programs in addition to CHOBA were operating.

The most frequently mentioned difficulties included the need to make many visits to households to motivate them and to explain the technical guidelines (31), that many houses could not afford latrines (26), that households were not interested in having a latrine (23), the incentive for the officials was low (23) and that there was too much paperwork (18). The difficulties mentioned were similar in the two provinces.

Most respondents suggested that the program should continue so that more households could build latrines (43 out of 52). Most also said that there should be more financial incentives for the promoters, officials and households.

4 Observations

4.1 EMW monitoring and verification processes

The results of this independent verification indicate that EMW's monitoring of CHOBA outputs is very effective. The process has several steps, providing checks along the way to identify and correct

the inevitable errors introduced by involving many jurisdictions and households. Vietnam's EMW input database has more than one million households. The input data were collected by so many people, including volunteers. EMW trained data collectors and provide feedback on quality to implementing partners and commune councils, but could not directly supervise the work.

The input database enabled EMW to check claimed OBA and non-poor CCT latrines to make sure the households were listed, did not already own a hygienic latrine and met the economic status eligibility. Between 30 and 100 percent of claimed latrines that were eligible based on the input database check were then physically verified by the EMW team. Those found not to meet the requirements were rejected. Rejection rates of more than 10 percent resulted in the commune being removed from the CHOBA program.

Everyone from the householder, village promotor and chief to the provincial directors of the implementing agencies understood there was no tolerance for false claims. Knowing the claims will be verified by EMW was an essential ingredient. We heard stories of disputes regarding verification findings, suggesting this was an issue that was taken very seriously.

EMW did not geo-code households or provide any additional identifying information about the households. Data entry and storage has been a challenge for the EMW M&E teams in both countries and most information is still collected on paper and re-entered electronically. Until some form of mobile entry is established, adding more identifying information for each household is not likely to be cost-effective.

4.2 Outputs based approach

During the designing and pretesting phases, the independent verification consultants had opportunities to meet with the implementing partners from all four selected provinces. We heard the same story that we had heard from the EMW project managers: the output-based approach was a challenge to implement. Project managers had to change their ways of working; they had periods when they did not think they could achieve the CHOBA targets and they faced resistance from staff and partners. They had to learn to budget and invest in efforts that would bring results. The most motivated managers made policy and procedural changes during the course of the program to increase the numbers of participating households. Such changes included, but were not limited to, changes in the incentive structures, alliances with other agencies responsible for health promotion or loans, creating new financing mechanisms to make latrine ownership more attractive to the poor, and using local initiatives to motivate households.

“Why payments for outcomes? Simply put, the higher powered incentives are intended to increase discipline. Results-based financing is increasingly attractive to donors and governments under pressure to demonstrate transparency, accountability, and value for money in transfers to the poor (whether domestic or international). Making such approaches work in practice sometimes proves challenging, however. Targeting services to intended beneficiaries and verification of results, both of which are critical to credibly claiming value for money of an undertaking, can be very challenging in practice.”

Rationale for the approach from the Independent Verification TOR

In both countries we heard of advocacy with the government to adopt an outputs-based approach with incentives at the household level and possibly at the commune level and for village promoters.

Although some representatives still believed it was better if donors paid all of the costs of latrine construction instead of only an incentive, several saw CHOBA as a positive alternative to the much more expensive option of fully paying for the construction of latrines or limiting program activities to education and behaviour change communication.

The role of local government in both countries cannot be overstated. Local officials were very engaged with the project through holding community meetings, visiting households many times to promote latrine ownership and to arrange payment and other record keeping. They also reinforced the message in unique ways, such as encouraging prominent community members to install latrines, directing other NGO projects to support households that were too poor to participate in CHOBA and telling households that were planning marriage festivities that they should have a latrine for guests. Almost all community informants interviewed for the project knew (or at least felt confident to give an estimate) of the rate of household latrine ownership in their catchment, which is evidence of local governments' support of latrine ownership.

4.3 Targeting poor households

Overall, the verification results suggest that the CHOBA model promoted hygienic latrine ownership fairly effectively among poor households in both Vietnam and Cambodia. However, reaching the absolute poorest households in each community, who could not afford to finance the difference between the CHOBA subsidy and the total cost of latrine construction, was a challenge for CHOBA in the provinces covered by the independent verification.

The Cambodia program, which had a lower cost latrine, enabling greater penetration to the poorest households significantly changed the perception of latrine affordability and contributed to the ease of installation. However, the trade-off seemed to be a lower level of latrine use.

In Cambodia, a large proportion of the OBA sample had no latrine before the project started. The low cost and convenience of ordering and installation convinced poor households to purchase a latrine. The incentive and, at least in Pursat, easy access to a small loan, may have also helped convince them. However, we found that the poorest households (ID Poor 1 and 2) did not construct a shelter that would give them the privacy they needed to use the latrine. Although the independent verification did not explore the reasons, they probably involve some combination of lacking capacity within the household to construct a low-cost shelter (many of the poorest households consist of an elderly woman or couple), the funds to pay someone to do the work or the motivation to make the latrine functional.

In the better-off province in northern Vietnam, the very poorest households were as likely to participate as others. In the poorer southern province, the poorest households were less likely to participate than those in the economic hardship category. The discrepancy may have been greater without the effort of the Women's Union and Commune Councils to mobilize more assistance to the poorest families.

4.4 Improved sanitation and hygiene

There were stark differences in sanitation in the study provinces of both countries before and after CHOBA. Almost all households that were part of the study in Vietnam had some sort of latrine before the program, although they did not meet the government's standard of a hygienic latrine. CHOBA, which included not only rebates but also intensive house-to-house promotion of latrines,

resulted in many purchasing septic tanks and, often, installing them in or adjacent to their houses. In Cambodia, most of the households in the OBA and CCT samples had previously defecated in the open or used a very simple latrine that left faeces exposed. CHOBA promoted low-cost hygienic latrines that were convenient to order and install. However, many poor households lacked the resources or motivation to make use of their new asset and many poor and non-poor households who installed and used their latrines had not established handwashing facilities and soap.

The differences between the programs in the two countries are vividly displayed in Figure 3, showing photographs of 10 randomly selected and independently verified OBA latrines in each country. Considering that so many Cambodian households had not even constructed a simple shelter for their latrine at the time of the independent verification visit, it is not surprising that a low proportion of households were making use of them.

It is important to acknowledge that CHOBA focused on outputs and not outcomes. Its purpose was to test a funding model to accelerate household latrine ownership, especially by poor households. It is well recognized that constructing hygienic latrines is only part of a solution to improved sanitation.⁸ As many commentators from academia, advocacy groups and the villagers we spoke with noted, latrines are about more than reducing disease. Access to sanitation is increasingly being considered a basic human right.⁹ A latrine for the exclusive use of the household, in or near by the family home, is safer for women and children who may be vulnerable to assault.¹⁰ It is also convenient for all people, especially those who fear animals, insects and other nocturnal dangers. We met a number of elderly and disabled people and their carers who told us how their new latrine made their life much easier.

⁸ Clasen, T., Boisson, S., Routray, P., Torondel, B., Bell, M., Cumming, O., et al, Effectiveness of a rural sanitation programme on diarrhoea, soil-transmitted helminth infection, and child malnutrition in Odisha, India: a cluster-randomised trial, *The Lancet Global Health*, vol 2, no 11, e645-e653, 2014.

⁹ Luby, S, Is targeting access to sanitation enough? *The Lancet Global Health*, vol 2, no 11, e619-e620, 2014.

¹⁰ Pradyumna, A., Im, P., & Ck, G., Moving beyond sanitation's diarrhoea fixation, *The Lancet Global Health*, 3(1), e16, 2015.

Figure 3: Randomly selected verified latrines from Vietnam and Cambodia, illustrating different construction styles

Vietnam



Cambodia



4.5 Lessons learned concerning independent verification

In planning and conducting the independent verification we benefited from the direction of the project manager in the BMGF and lessons continued in similar exercises.

Cooperation and joint decision making with EMW was a key part of our approach. We sought to learn as much as possible about program implementation and the M&E process. This assisted the operational aspects of the independent verification. EMW staff helped the process in many ways, including:

- Training the data collectors and their supervisors how to verify latrine construction and poverty status.
- Introductions and reinforcement of the importance of the independent verification with implementing partners and relevant government departments.
- Provision of verification tools and sharing of lessons learned.
- Timely provision of all data requested.
- Facilitating meetings with partners and beneficiaries at all levels to gain a thorough understanding of program implementation.

These good relations were made possible by the BMGF including time in-country to design the protocol and then to work closely with local research firms to ensure quality. This gave ample opportunity for EMW teams provided a great deal of constructive input into protocol and questionnaire development, training and pretesting.

Identifying households was one of the most challenging aspects of the independent verification. Geo-coded location of households would have assisted the process and, arguably, made it more independent. The baseline and EMW verification data only included the commune, village and name of the household head. No maps or the equivalent of an address or phone number was provided. This meant that the independent verification teams needed to locate each house, almost always seeking the assistance of the Village Chief or, in the case of Vietnam, Women's Union representative. While the IV teams reported that their local guides respected their need to conduct interviews in private, their presence could have influenced the information householders gave, especially concerning the construction date.

5 Conclusion

CHOBA has met its goal of accelerating the ownership of hygienic latrines in Vietnam and Cambodia. The output-based funding model appears to have motivated local governments and implementing partners to find innovative and effective strategies to increase latrine ownership. The very high rates of positive verification of the latrines claimed by EMW are a testament to the integrity of the program.

Recent evaluations of India's massive program to encourage every household to have their own latrine have found that the intervention does not necessarily increase latrine usage or improve health.^{11 12} Nevertheless, hygienic latrines are an essential first rung on the sanitation ladder. From Vietnam's sophisticated indoor bathrooms to the simple structures constructed by poor Cambodian families, the infrastructure necessary for behaviour change has been established.

¹¹ Clasen, *ibid.*

¹² The effect of India's Total Sanitation Campaign on defecation behaviors and child health in rural Madhya Pradesh: A cluster randomized controlled trial

Annex 1: Opinions of commune and village officials about CHOBA, Cambodia, open-ended answers, no promoting (N=47).

What have been the benefits of the latrine project for the people in this commune/village?	
Improved the awareness of local people about sanitation and hygiene	34
Improved the health of local people/less sickness because of improved hygiene	29
Increased the usage of hygienic latrine in the region	25
Helped to improve the local environment/no bad smell around village	19
Helped poor people to have a latrine	16
Motivated non-poor households to construct a hygienic latrine	10
More safe and secure at night	8
Helped the commune/district to achieve one of the government targets	5
During any ceremony, it is not difficult to find a place to defecate/urinate	2
Reducing open defecation	2
Not afraid of losing personal privacy	1
Cut down expenses within the family	1
Eliminate poverty	1

In your opinion, what has made the implementation of this latrine project successful in your commune/village	
The people have been educated about the importance of latrines	33
The local authorities have been very supportive	26
RACHA (Pursat) or the PDRD (Prey Veng) have been very active in implementing it	25
We increased incentives to households by combining the rebates of discounts from this latrine project with other programs	18
The poor households in this community were very interested in having latrines and this latrine project made it possible for them to afford one	15
The microfinance loans helped people afford latrines	8
Disseminated information on how to build latrines	4
Organization staff came to disseminate information	4
Encourage people to clean the village	3
Did not charge poor people	2
There should not be a condition for everyone to get a discount when installing latrines	2
Project staff such as chief and deputy chief of village advise people to use latrines	1

What types of activities have been done in this commune/village to support households to construct a latrine?	
Explaining the benefits of building a latrine by making household visits	41
Explaining the benefits of building a latrine at community meetings	32
Making it more convenient for households to get a latrine installed	25
Assisting/connecting households to get loans for latrine construction	15
Providing financial support in addition to the CHOBA rebate	14
Making it more convenient for households to buy latrine supplies	9
Commune Chief and Village Chief promote the benefit of toilets	2
Disseminate information about how to keep village hygienic	1

In your opinion, what were the difficulties you had to face while doing the project?	
It is still too expensive for many rural households/many face economic hardship/many have no money to install a latrine	32
It takes many visits to motivate households to build a latrine	31
Households do not pay on time/takes many visits to collect money	19
Households are not interested in having a latrine	17
Households cannot get loans to finance a latrine	6
Slow disbursement of funds from the latrine project	5
No money to build walls and rooves	5
No incentive for deputy Village Chiefs who spend much time with the project	4
Not enough financial incentive for Commune Council or Village Chiefs	3
Project targets have been set very high, leading to discouragement	2
Paperwork for the project is too complicated or time consuming	2
Latrine technicians were unskilled - latrines were not properly installed, and sewage systems were blocked, many people complained	2
People don't understand about the benefits of latrines	2
The cost for a latrine is different for non-eligible households	1
No money to hire a technician to install the latrine	1
Latrines are low quality (when water is poured, it does not work)	1
Do you have any suggestions for how to improve this latrine project?	
Provide free latrines to very poor households who cannot pay	33
The program should be extended so that more households can own hygienic latrines	18
Reduce the cost of the latrines	18
Reduce the number of visits to households	16
Provide more incentives at the commune level to implement the program	15
Provide more incentives to the promoters at the village level	10
Offer walls and rooves for free	6
Decrease latrine costs	5
Ask the organization to come to educate people more about building latrines	5
Find donors	3
Provide latrines to each household for free	3
Build latrines in schools	3
Ensure cost is the same for people who have not built latrines yet	2
Give money to deputy or Village Chief when they direct	1
Give incentive to people who propagate villagers	1
Provide help to dig ponds	1

Annex 2: Opinions of Women’s Union representatives and other commune and village officials about CHOBA, Vietnam, open-ended answers, no promoting (N=51).

According to you, what have been the positive aspects of the CHOBA program for the local population?

Helped to improve the local environment	45
Improved the awareness of local people about sanitation & hygiene	42
Improved the health of local people because of better hygiene situation	34
Helped the commune/district to achieve one of New Rural Area Development Program criteria	28
Increased the usage of hygienic latrine in the region	26
Helped poor people to have a latrine	19
Motivated non-poor households to construct a hygienic latrine	8

What activities have been done in this commune/village to support households to construct a latrine?

Promoting latrine ownership at community meetings	22
Something specifically for very poor households	18
Assisting/connecting households to get loans for latrine construction	17
Providing financial support in addition to the CHOBA rebate	16
Promoting latrine ownership by making many household visits	14
Making it more convenient for households to get a latrine installed	5
We do not organize any specific support to households at communal level	4
Commune sent builders to build latrines for people/Support workdays to build toilets/Organised volunteers	5
Making it more convenient for households to buy latrine supplies	3

What difficulties did you have to face doing the project?

It takes many visits to motivate households to build a latrine, teach technical guidelines	31
Many household still face economic hardship/latrines too expensive for some households	26
Households are not interested in having a latrine	23
Management fee/incentive is too small/ not enough to cover the cost	23
Paperwork for the project is too complicated or time consuming	18
Household cannot get loans to finance a latrine	10
Project targets have been set too high/too low	12
Slow disbursement of funds	6
Many families do not really believe in the project/they do not believe that they could get the incentive	3
OBA financing (no or little advance payment) caused difficulties to conduct project activities	2
Incentives are too low to attract people	2
Households don’t have land to build latrines	1
Few promoter/insufficient or ineffective communicators to convince people	2
Project implementation time is short	1

What suggestions do you have to improve CHOBA?

The program should be prolonged so that more households could own hygienic latrines	43
Should have more financial support for promoter	31
Increase the incentives for both households and Women’s Union	23
Too many verifications of households	14

Increase the proportion of difficult households so that everybody can have latrines/Increase the proportion of difficult households by more than 20%	4
Expand the program to other objectives	4
CHOBA should cooperate with Vietnam Bank for Social Policies to support capital to the household/support people to borrow loans	4
More financial aid for households	3
Incentives need to be disbursed faster	2
Need a person from the program to directly monitor the operation in the commune	1
Several households registered to participate in the program, however they did not submit the final document in time so they do not get the rebate. There should be some support for such households.	1
Lower the requirements to get the incentive	1
Should have support for the commune project management	1
Timely reward for the commune and individuals who work well during implementation of the project	1
There should be better communication between the program and the people	1

Interviewer name: _____ Interviewer ID: _____

Interview ID _____

Respondent name _____

Address: _____

Date of interview: _____

Time of interview: Start _____ End _____ Duration: _____

INTRODUCTION

Hello, my name is _____, from Indochina Research Cambodia Ltd. We have been assigned on behalf of Bill and Melinda Gates Foundation, who sponsors the Latrine construction program, to review some of the outputs of the programs including the type of latrine installed. We would much appreciate if you could take few minutes with us for this short interview. We also would like to visit the latrine that has been constructed under the program and take some photos of your latrine for reporting purposes to Gates Foundation.

All of the information that you give to us will be anonymous and keep confidential. It will only be used for reporting purposes. May I talk with you now?

Will you please bring your family book and poor card (if owned)?

PART 1 - OVERALL INFORMATION

Q1. Location

District (pre-populated from F11)

Commune (pre-populated from F11)

Village name (pre-populated from F11)

Q2. Type of sample (SA)

CHOBA beneficiary Household (poor /near poor/economic hardship households received rebate)	1
--	---

Q3. CHOBA ID (Record from the data list) (SA)

CHOBA ID		
CHOBA Commune number		

Q4. I understand that your family built a latrine since June 2013. Is that true? (SA)

Yes	1
No	2

Q5. Do you know about the construction of the latrine?

5	Do you know about the construction of the latrine?	1	Yes <i>Move to Q5.1</i>
		2	No, I do not know enough to answer questions <i>Schedule for meeting with head of household or someone else who was involved in the construction process</i>
5.1	Name of main respondent who knows about the latrine construction		_____
5.2	What's your relationship with the head of household?		1. Spouse 2. Head of household's son or daughter 3. Relative living in the same home with head of household 4. Neighbour 5. Household head 6. Other(Specify)_____

PART 2 - HOUSEHOLD VERIFICATION

Q6. What is the head of household's name listed in the HH's registration book?

		Name
6.1	Name of household from recorded data set (F11 verification data)	
6.2	View name of the household head from family book Are the two names consistent?	1. Yes -> Skip to C1 2. No → <i>Move to 6.3</i>
6.3	<i>Ask the respondent if there is any reason for inconsistency. Ask to see the household registration book to see if respondent is part of the family. If he/ she do not know, come back ask the village head/ PDRD official for clarification.</i>	Write the reason given by the householder:

--	--	--

Conclusion:

C1	In the interviewer's opinion, is this the same household verified with F11?	1. Yes → Go to Q7 2. No → <i>Stop the interview and Cross-check with communal local official. Find & restart the interview with right HH (if you can find)</i> <i>If you cannot find the HH → Move to C2</i>
C2	What is the reason that you cannot find	1. Household moved 2. HH Does not exist (need to carefully check with commune/ head of village) 3. Other

Q7. What is the economic status of your household? (SA)

(For CHOBA Household only – choose code 1 in Q2)

7.1	What was the poor status of your household when the latrine was installed?	1. ID Poor 1 2. ID Poor 2 3. ID Poor 3 → <i>Move to 7.6</i> 4. None of the above 5. Not sure
7.2	Status of household from recorded data set (F1a)	1. ID Poor 1 2. ID Poor 2 3. ID Poor 3
7.3	Status of household from recorded data set (F11)	1. ID Poor 1 2. ID Poor 2 3. ID Poor 3
7.4	<i>Look at the poor card and record the status in use when latrine was built</i>	1 Poor ID 1 2 Poor ID 2 3 Did not see the card <i>Skip to Q 7.11 SUPERVISER TO FOLLOW UP</i>
7.5	What is the year of poor card?	1 2011 2 2012 3 2013 4 2014 5 2015
7.6	<i>Use the checklist to determine poor score for all ID Poor 3</i>	Score: _____
7.7	Is the score	1. Yes

	between 0 and 33?	2. No
7.8	What is the poor status of this household based on your findings?	<ol style="list-style-type: none"> 1. ID Poor 1 2. ID Poor 2 3. ID Poor 3 4. Non Poor
7.9	Is the status consistent between EMW and interviewer? (SA)	<ol style="list-style-type: none"> 1. Yes -> <i>Skip to Q8</i> 2. No
7.10	<p><i>If inconsistent, ask the respondent if there has been a recent change in circumstances. For example has a household member got a new job, ID Poor card issued after the latrine, or have they improved their house? Record their answers.</i></p> <p><i>Confirm with the village head if necessary.</i></p>	
7.11	Should supervisor follow up?	<ol style="list-style-type: none"> 1. Yes 2. No

PART 3 - LATRINE VERIFICATION

Q8. Type of latrine before construction (single answer)

Q9. Type of latrine after construction (single answer)

Refer to the **show card** to types of latrine

Double check construction type in observation

	OBSERVATION	Q8 Before construction	Q9 After construction
	Hygienic latrine		
	Hygienic Latrine (Off set Pour – flush latrine, on set pour flush latrine or septic tank)	1	1
	Unhygienic Latrine		
	Dry pit toilet with pan	2	2
	Pit latrine without pan	3	3
	Fish pond/ river/ponds/cannels	4	4

	No Latrine (Bush/garden/fields)	5	5
	Shared latrine (Do not have own latrine)	6	6
	Other (Specify): _____	7	7

C3	Was the latrine before CHOBA period classified as hygienic?	1. Yes 2. No
----	---	-----------------

Q10. Time of construction – When did your household construct the new latrine?

10.1	10.1. verification date (pre-populated from F11):	Month:____ Year:____
10.2	10.2a) Start date of program in commune MM/YY	10.2 b) Did construction complete after 10.2a? 1. Yes 2. No
10.3	When was the underground works of the latrine completed?	MM/YY
10.4	Is the finish date in 10.3 the same or after the start date for the commune	1. Yes 2. No → <i>Not eligible</i> Note for interviewer, if constructed in 2014, 2015= eligible
10.5	If not eligible in Q10.4, the interviewer should cross check to make sure about the construction date. Use the observation skills to probe for your doubt in a tactful way. Change the answer in 10.2b) if necessary and record the reasons there was confusion, for example the householder didn't remember.	

Q11. Who installed the underground part of the latrine? (MA)

Household members organized and installed	1
Installed by someone else (volunteer)	2
Installed by someone else (paid)	3

Do not know	4
-------------	---

Q12. Financial aspect (SA)

12.1	How much did the underground part and pan of this latrine cost?	1. ___\$_____ 2. Do not know
12.2	Approximately how much did you spend in total on this latrine including walls and roof?	1. ___\$_____ 2. Do not know <i>skip to Q12.4</i>
12.3	What did this total amount include?	1. Latrine pad and base only 2. Latrine with walls 3. Bathroom 4. Kitchen 5. Other house construction
12.4	Are you and your family currently using this latrine? (prompt)	1 Always 2 Some of the time 3 Rarely

Ask to observe latrine

Q13. Observation of Latrine / Type of shelter

13.1	Is latrine separate from the house?	1. Yes 2. No
13.2	Observe and record all about the shelter that applies to the nature of the latrine	1. Built with a bathroom in same or adjacent room 2. No bathing facilities attached
13.3	Does the latrine have a roof?	1. Yes 2. No
13.4	What are the walls made of?	1. No walls/ shelter 2. Concrete with floor and wall tiles 3. Concrete or brick with little or no tiles 4. Corrugated iron 5. Leaf, cloth or plastic 6. Other _____

Q14. Latrine working

14.1	Pour the water into the pan / flushing.. to check if latrine is working	1. Yes – move to Q15 2. No
14.2	Ask the household reason for not working? (OPEN)	
14.3	How long ago did it stop working?	___ months

Q15. Regular use - Is the latrine regular used?

15.1	Observe signs that the latrine is regularly used.	<ol style="list-style-type: none"> 1 Accessible – easy to get in 2 Well-worn path to the latrine observed 3 Wet latrine floor 4 Slippers for latrine Use observed near latrine 5 Available water for flushing or anal cleansing observed 6 Available water near latrine for hand washing observed 7 Used waste basket / container 8 Hand washing agents (eg., soap, soapy water, soap detergent) observed 9 Other observed evidences
15.2	As your observation, is latrine regularly used.	<ol style="list-style-type: none"> 1. Yes → <i>Skip to Q16</i> 2. No
15.3	If no, double check with the respondent. According to the respondent is their latrine regularly used?	<ol style="list-style-type: none"> 1. Yes -> Go to Q16 2. No

Q16. Observation of the latrine

		Yes	No
16.1	Concrete rings	1	2
16.2	Concrete cover/ slab	1	2
	Toilet Base		
16.3	Squat base	1	2
16.4	Toilet Seat	1	2
	Hygienic behaviors		
16.5	Hand washing facility setup in easy access to latrine (3-4 m)	1	2
16.6	Soap/detergent present	1	2
16.7	Have water basin as hand washing device	1	2

NOTES FOR VERIFICATION
Thanks the respondent & give incentives

(Also inform them above possible come back/ call back for further information)

**	May we have your phone number in case we need further information?	<ol style="list-style-type: none"> 1. Yes 2. Refused
	Phone number	

INTERVIEWER TO COMPLETE AWAY FROM THE HOUSE

1	How was the attitude of the respondent during the interview ? Rate Comfort level of respondent <i>1 very uncomfortable 5 very comfortable</i>	1. Very uncomfortable 2. Uncomfortable 3. Neutral 4. Comfortable 5. Very comfortable	
2	How was the attitude of the respondent during the interview ? Rate Communication level of respondent <i>1 very closed to communicate 5 very open to communicate</i>	1. Very open 2. Open 3. Neutral 4. Closed 5. Very Closed	
3	Have you been able to complete the interview?	1. Yes <i>Go to Q5</i> 2. No	
4	Please explain why you have not been able to complete the interview.	[open]	
5	Does the team leader have to check records about Poor 1 or 2 status (see Q 6.4)	1. Yes 2. No [End]	
6	If the interviewer thinks the household may be ineligible, write why and explain how they investigated. (MA)		<i>Check</i>
		1. Wrong economic status	<i>Q7.9</i>
		2. Wrong household Identification	<i>Q6.2</i>
		3. HH already had a pour flush latrine before the new latrine was installed	<i>Q8</i>
		4. Latrine never worked	<i>Q14.1</i>
		5. Yes, latrine is not pour flush or septic (not hygienic)	<i>Q9</i>
		6. Construction was before CHIBA started in the commune	<i>Q10.4</i>
		7. HH meets all eligibility criteria	
		8. Not sure	

SUPERVISER

SP1	Based on the questionnaire conclusions and your observations, does the HH meet the criteria?	Household C1	Yes	No
		Poor Status Q7.9	1	2
		Hygienic Latrine C3	1	2
		Construction period	1	2
		Q10.4		
SP2	How did you follow up?	1. Checked with village head 2. Checked with commune official 3. Other		

SP 3	From records was Household on Poor list?	<ol style="list-style-type: none"> 1. Yes 2. No
SP4	Verified Status	<ol style="list-style-type: none"> 1. ID Poor 1 2. ID Poor 2 3. ID Poor 3 4. Unable to be verified
SP5	I have checked this survey. My judgment is that this household is	<ol style="list-style-type: none"> 1. Eligible 2. Ineligible 3. Other action to take

Interviewer name: _____ Interviewer ID: _____

Interview ID _____

Respondent name _____

Telephone/ Mobile number: _____

Date of interview: _____

Time of interview: Start _____ End _____ Duration: _____

VERIFICATION OF POOR STATUS (to be completed by supervisor)

S1	Household head <prepopulated from F11>	
S2	Do you find the HH in the communal lists	1. Found → Move to S3 2. Not found
S3	Which list is the HH in?	1. Commune poor list 2. Commune near poor list 3. Commune economic hardship list
S4	Year of list Year of verification (for reference)	
S5	Household number on list / page number	

INTRODUCTION

Hello, my name is _____, from Indochina Research Vietnam Ltd. We have been assigned on behalf of Bill and Melinda Gates Foundation, who sponsors the CHOBA - Latrine construction program, to review some of the outputs of the programs including the type of latrine installed. We would much appreciate if you could take few minutes with us for this short interview. We also would like to visit the latrine that has been constructed under the program and take some photos for reporting purposes to the Gates Foundation.

All of the information that you give to us will be anonymous and keep confidential. It will only be used for overall reporting purposes.

PART 1 - OVERALL INFORMATION**Q1. Location**

District	«District»
Commune	«Commune»
Village	«Village»

Q2. CHOBA ID (Record from the data list)

CHOBA ID		
CHOBA Commune		1
CHOBA + Commune		2

Q3. Type of sample

CHOBA beneficiary Household (poor /near poor/economic hardship households received rebate)	1
Non-poor households in CHOBA project communes (no rebate received)	2

Q4. I understand that your family built a latrine in the past 3 years. Is that right?

Yes	1	
No	2	Move to Part 2

Q5. Do you know about the construction of the latrine?

Yes	1	<i>Move to Q5.1, Q5.2 then Part 2</i>
No, I do not know enough to answer relevant questions	2	<i>Ask to meet someone else who was involved in the construction process, or Schedule for meeting with head of household</i>
What is your name		Record name of respondent _____
Are you the Head of the Household?		Yes -> Compare with name in Part 2 No -> Continue
What's your relationship with the head of household?		1. Spouse 2. Head of household's kid 3. Relative living in the same home with head of household 4. Others (Specify)_____

PART 2 - HOUSEHOLD VERIFICATION

Q6. What is the head of household's name & YOB as listed in the HH's registration book?

		Name	YOB
6.1	Name of household from recorded data set (F11)		
6.2	What is the name of the household head and date of birth? Are the two names consistent?	1. Yes 2. No → <i>Move to 6.4</i>	1. Yes 2. No → <i>Move to 6.4</i>
6.3	<i>If different, record the head of household's name & YOB given</i>		
6.4	<i>Ask the respondent if there is any reason for inconsistency. Ask to see the household registration book to see if household is part of the family. If he/she do not know, come back ask the WU for clarification.</i>		

Conclusion:

C1	Is this the same household verified with F11?	1. Yes → Continue 2. No → <i>Stop the interview and Cross-check with WU/ communal local official. Find & restart the interview with right HH (if you can find)</i> <i>If you cannot find the HH → Move to C2</i>
C2	What is the reason that you cannot find	1. Household moved 2. HH Does not exist (need to carefully check with WU/ head of village) 3.

(For **CHOBA Household only** – choose code 1 in Q2)

Q7. Based on what economic status did you qualify for this project?

7.1	What was the poor status of your household when the latrine was installed?	<ol style="list-style-type: none"> 1. Poor 2. Near-poor → <i>Move to 7.3</i> 3. Economic hardship → <i>Move to 7.3</i> 4. None of the above → <i>Move to 7.3</i> 5. Not sure
7.2	<p>Do you have any documentation that shows that this is a poor listed HH? (Example: Poor HH booklet)</p> <p><i>Note: Many households have not received the poor certificate issued</i></p>	<ol style="list-style-type: none"> 1. Yes, ask the respondent show the evidence and record what it is: <hr/> <ol style="list-style-type: none"> 2. No, that's fine and move to next question
7.3	Status of household from recorded data set (F1a)	
7.4	Status of household from recorded data set (F2a)	
7.5	Status checked in the household package (Registration form – hardcopy) – if the data for F2a is not available	<ol style="list-style-type: none"> 1. Poor 2. Near-poor 3. Economic hardship 4. None of the above
7.6	Is the status consistent?	<ol style="list-style-type: none"> 1. Yes 2. No → <i>Move to 7.7</i>
7.7	<p>Where's the inconsistency between?</p> <p><i>Ask the respondent if there is any reason for inconsistency.</i></p> <p><i>Come back ask the WU for clarification</i></p>	

(For CHOBA Household only – choose code 1 in Q2)

CONCLUSION FOR ELIGIBILITY

After checking all the data and asking respondent, is the HH eligible for the program?

Poor/ Near-poor/ Economic Hardship	1	<i>Eligible</i>
Other status	2	<i>Not eligible</i>
Not sure	3	Check with WU

PART 3 - LATRINE VERIFICATION

Q8. Type of latrine before construction

Q9. Type of latrine after construction

Ask respondent about the type of Latrine they had before the project. Observe the new latrine for this question

Refer to the show card to types of latrine

		Q8 Before construction	Q9 After construction
	Hygienic latrine		
1.	Septic tank latrine	1	1
2.	Biogas latrine	2	2
3.	Ventilated double-vault composting latrine	3	3
	Unhygienic latrine		
4.	Pour – flush latrine	4	4
5.	Pit latrine without cover	5	5
6.	One vault latrine, composting ash, bucket latrine	6	6
7.	Hanging latrine over a river/ponds/cannels	7	7
8.	No Latrine (Bush/garden/fields)	8	8
9.	Shared latrine (Do not have own latrine)	9	9
10.	Other (Specify): _____	10	10

CONCLUSION TO CHECK THE ELIGIBILITY

Instruction to check the eligibility – Definition of eligibility

- Any code (except for code 1 – Septic tank) in Q9 move to code 1 in Q10
- Any code from 4 to 10 in Q9 move to any code 1, 2, 3 in Q10
- If move up from code 2(Q9) to code 1(Q10) or from code 3(Q9) to code 2(Q10)
- Non-eligible: code 1 in Q9
- Non-eligible: code 4-10 in Q10

C1	Is the latrine after CHOBA period classified as eligible?	<ol style="list-style-type: none"> Yes No
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Q10. Time of construction – When did your household construct the new latrine?

10.1	Ask the respondent and record time of latrine construction (Solar: month/year) - Time for verification (prepopulated): - Time for disbursement (prepopulated):	
10.2	Was the construction after:	<ol style="list-style-type: none"> 1. CHOBA (after June 2012 – from 12/04 Lunar calendar) 2. CHOBA + (after July 2013 – from 24/05 Lunar calendar)
10.3	The construction period	
10.4	After comparing the data, is the construction of latrine eligible?	<ol style="list-style-type: none"> 1. Yes 2. No → <i>Not eligible</i>
10.5	If not eligible in Q10.3 or Q10.4, the interviewer should cross check to make sure about the construction date. Use the observation skills to probe for your doubt in a tactful way.	

Q11. Who installed the latrine?

Household members organized and installed	1
Installed by someone else (volunteer)	2
Installed by someone else (paid)	3
Do not know	4

Q12. Financial aspect

12.1	When you constructed this latrine, approximately how much did you spend in total?	<ol style="list-style-type: none"> 1. _____ 2. Do not know
12.2	What did this amount include? (MA)	<ol style="list-style-type: none"> 1. Latrine 2. Bathroom 3. Kitchen 4. The house 5. Other house construction

Q13. Source of financing and rebate aspects

13.1	How did you source your finance for latrine construction? (MA)	<ol style="list-style-type: none"> 1. Household source 2. Other family member 3. Loan from bank 4. Other sources _____
13.2	Did you receive a rebate for your latrine construction?	<ol style="list-style-type: none"> 1. Yes → Move to 15.3 2. No → Move to Q16
13.3	How did you receive the rebate? (No prompting, no SC)	<ol style="list-style-type: none"> 1. I received cash from Women union 2. It was deducted from my loan at Bank for Social policies 3. Other specify _____

Q14. Latrine working Test

14.1	For septic tank: Pouring the water into the pan / flushing.. or any check according to EMW training on checking the Latrine. Is the latrine working?	<ol style="list-style-type: none"> 1. Yes 2. No → Move to 14.2
14.2	Ask the household reason for not working? How long ago? If the latrine has been destroyed or reconstructed since verification.	

Q15. Regular use - Is the latrine regular used?

15.1	Are you and your family currently using this latrine?	<ol style="list-style-type: none"> 1 Yes 2 No
15.3	As your observation, is the latrine regularly used.	<ol style="list-style-type: none"> 1. Yes 2. No → Move to 15.4
15.4	If no, double check with the respondent. According to the respondent is their latrine regularly used?	<ol style="list-style-type: none"> 3. Yes 4. No → Move to 15.5
15.5	Ask the respondent why it is not regularly used?	

Q16. Location of Latrine / Type of shelter

16.1	Observe and record all about the shelter that applies to the nature of the latrine	<ol style="list-style-type: none"> 1. Built with a bathroom in same or adjacent room 2. No bathing facilities attached
16.2	Is the latrine covered (has a roof)?	<ol style="list-style-type: none"> 1. Yes 2. No
16.3	What is the finishing of the Latrine made of?	<ol style="list-style-type: none"> 1. Concrete with floor and wall tiles 2. Concrete or brick with little or no tiles 3. Corrugated iron 4. Leaf or cloth 5. Other _____

Q17. Observation of the latrine

		Yes	No	Cannot be observed
	Hygienic criteria for septic tank			
	Ventilation pipe	1	2	3
	Sealed Tanks have 2 or 3 chambers	1	2	3
	Hygienic criteria for double vault			
	Double vault chamber	1	2	3
	One lid up and one lid down	1	2	3
	Ventilation pipe	1	2	3
	Sealed fertilizer gate	1	2	3
	Hygienic facilities and behaviors			
	Hand washing facility setup in easy access to latrine (3-4 m)	1	2	3
	Source of water for flushing nearby (walk and easy access 3-4m) (septic tank only)	1	2	3
	Hand washing agents (eg., soap, soapy water, soap detergent) observed	1	2	3
	Evidence of usage			
	Accessible – easy to get in	1	2	3
	Well-worn path to the latrine observed	1	2	3
	Wet latrine floor (for septic tank)	1	2	3
	Slippers for latrine Use observed near latrine	1	2	3
	Used waste basket	1	2	3

NOTES FOR VERIFICATION
Thanks the respondent & give incentives

(Also inform them above possible come back/ call back for further information)

**	<i>May we have your phone number in case we need further information?</i>	1. Yes 2. Refused
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