



ENDLINE EVALUATION

**Women-Led Output-Based Aid (WOBA) Cambodia
Water for Women Fund (Australian Department of
Foreign Affairs and Trade)**

Evaluation Report

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LIST OF ABBREVIATIONS

CC	Commune Council
CCWC	Commune Council for Women and Children
CDPO	Commune Disabled People’s Organizations
CHOBA	Community Hygiene Output-Based Aid (a previous EMW project)
CIP	Commune Investment Plan
CWA	Cambodian Water Association
DFAT	Department of Foreign Affairs and Trade
DORD	District Department of Rural Development
DRHC	Department of Rural Health Care
DPO	Disabled People’s Organization
EMW	East Meets West
FSM	Fecal Sludge Management
GESI	Gender and Social Inclusion
HH	Household
ISF-UTS	Institute of Sustainable Future – University of Technology Sydney
MIH	Ministry of Industry and Handicrafts
MoWA	Ministry of Women’s Affairs
MRD	Ministry of Rural Development
OBA	Output-Based Aid
PDIH	Provincial Department of Industry and Handicraft
PDRD	Provincial Department of Rural Development
PWD	People with a disability
RSCC	Rural Sanitation Clean Company (name of sanitation company)
RWSSH	Rural Water Supply, Sanitation and Hygiene
ToC	Theory of Change
TOT	Training of Trainers
WfW	Water for Women
WOBA	Women-led Output Based Aid

1. WOBA Project Description

WOBA Cambodia is a program designed and implemented by Thrive Networks/East Meets West (TN/EMW) to address challenges and inequities in Cambodia's rural water, sanitation and hygiene (WASH) sector. It is funded by the Australian Department of Foreign Affairs and Trade (DFAT) through the Water for Women Fund over 4.5 years (June 2018 to December 2022) with a total budget of 3.5 million Australian dollars.

1.1 WOBA objectives

WOBA has two objectives:

- Increase access to equitable WASH services, especially among marginalized community members.
- Improve gender empowerment and inclusion of women through program implementation and decision making.

WOBA has two key implementation components and targets:

- 3,750 poor households connect to piped water schemes – their connections will be co-financed through a competitive output-based pro-poor subsidy intervention.
- Improved access to hygienic sanitation in rural communities, with hygienic latrines constructed by 27,332 poor and non-poor households, with 4,000 of these in the poor/socially disadvantaged category; this will be complemented with a commercial sanitation intervention.

WOBA Cambodia is implemented in the rural areas of nine provinces: Prey Veng, Kampot, Kracheh, Pursat, Battambang, Kampong Cham, Kampong Speu, Kampong Chhnang, and Tboung Khmum.

1.2 WOBA's expected outcomes

WOBA has five expected outcomes (Annex 1) to address the project's two objectives, and align with the Water for Women Fund's goal of improved health, gender equality and wellbeing of Asian and Pacific communities through inclusive sustainable WASH, and four end-of-program outcomes. WOBA's five expected outcomes are:

1. Strengthened national and sub-national WASH systems with government able to implement and sustain inclusive output-based aid WASH approaches in rural Cambodia – achieved through a government co-financing requirement.
2. Strengthened private sector ability in sanitation and public/private enterprises in water to operate sustainably and reach poor and GESI communities in rural Cambodia; increasing their role in providing high quality WASH services to all.
3. Improved access to and use of equitable WASH services, especially among marginalised community members.
4. Improved gender empowerment and systematic inclusion of women and outcomes in households and communities and institutions.

5. Increased use of evidence and innovation in gender and inclusive WASH in Cambodia; increased contribution from Cambodia to regional and global evidence base.

1.3 WOBA's key strategies

The project has three strategies and expected to contribute to the five expected outcomes.

- 1) Partner with government at all levels, the Committees of Women and Children, and private sector WASH operators to deliver WASH services to non poor, poor and socially disadvantaged households in rural areas
- 2) Build capacity of WOBA partners organisations and private sector WASH suppliers to implement WASH services for poor and GESI households using a results-based subsidy program
- 3) Deliver MHH training to women and girls, and partner with CDPO and DPOs in disability inclusion training to apply a gender, disability and socially inclusive approach in WASH delivery in Cambodia.

2. Endline Evaluation

2.1 Purpose

The purpose of the Endline Evaluation is to assess the WOBA project using the OECD Development Assistance Committee (DAC) evaluation criteria. The findings could also be used to inform final reporting for Water for Women. The evaluation will address the following objectives:

- Evaluate performance against project objectives and expected outcomes as per the project's Theory of Change, and unintended outcomes.
- Assess the role TN/EMW has played in strengthening WASH system and Gender and Social Inclusion in rural communities.
- Assess WASH and Gender and Social Inclusion approaches used to deliver project activities and understand how these can be refined for future programming
- Capture lessons learnt related to implementing the WOBA project that can be applied to TN/EMW's future WASH projects, and for broader sector learning.

2.2 Key evaluation questions and scope

The evaluation will focus on all aspects of the project programming, including sanitation, piped water connection, climate resilient water safety plan pilot, FSM pilot, menstrual health hygiene training, and other WASH related trainings.

As a project funded by the Australian Government, specific requirements of the evaluation are outlined by DFAT, including:

- Draw on monitoring data as well as new data collected through the evaluation, to assess the approach, methodology, outcomes and impacts of the project
- Examine the project components in light of their original intention as well as how they have evolved, and any unintended consequences that have arisen
- Report on cross-cutting themes of gender equality, disability and social inclusion (GEDSI) and provide disaggregated data in regard to gender (men, women), and people living with disability
- Provide evidence-based information that is credible, reliable, and valuable.

The key evaluation questions and sub questions, and evaluation scope are structured within the three focus areas of inquiry to guide the data collection, analysis and reporting, and to address the WOBA's two objectives and in accordance with the OECD DAC evaluation criteria.

Relevance

1. How relevant is WOBA to government's policies in reducing inequality in access to WASH access in rural Cambodia?

Efficiency

2. To what extent has the project provided good value for money?

Effectiveness and impact

3. To what extent were the outcomes (as per ToC) achieved and factors influencing achievement and non-achievement of these outcomes?
4. What are the changes as results of WOBA at the household, community, business and government level?

Sustainability

5. To what extent are WOBA's outcomes sustainable at the community, business and government level?

2.3 Evaluation audience and users

Given the purpose of the Endline Evaluation is to provide a systematic and objective assessment of WOBA Cambodia's strategies and activities in delivering its two objectives, the users of this Endline Evaluation are Water for Women Fund, Thrive/EMW and DFAT. The secondary users are the Vietnamese government organizations, local NGOs and INGOs operating in Vietnam development sector. The Australian public are also interested in the Endline Evaluation results to ensure relevance, efficiency, effectiveness, impact and sustainability of Australian aid. The Endline Evaluation will provide key learnt lessons and recommendations to Thrive/EMW to design the related projects in the future.

3. Evaluation approach and methods

The endline evaluation addresses the evaluation questions, is consistent with the WfW Fund MEL Framework and DFAT M&E standards.

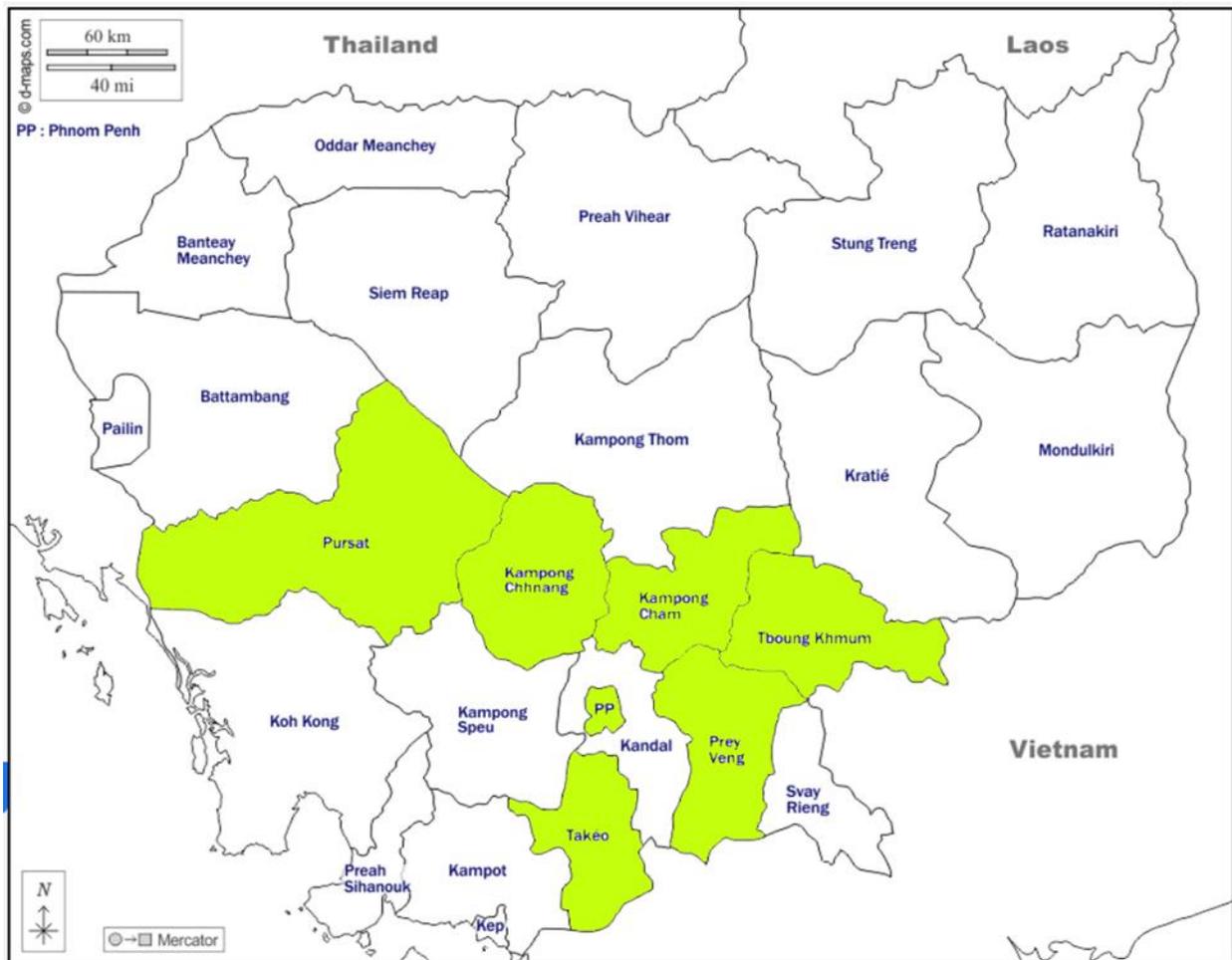
3.1 Methods

The following methods were used:

- Synthesis of secondary data collected from 1) the MTR; 2) survey with CCWC on women empowerment, 3) survey and focus group discussion with WASH suppliers on financial risks; 4) stakeholders and partners training reports; 5) water safety plan completion report; 6) DFAT compliance audit report; 7) monitoring data including verification reports on WASH products installed, and log frame report for Year 4.

- Phone interviews with women members of the Committee for Women and Children and Commune Councils, to gain further insights about the findings from the women empowerment survey.
- Survey of 165 households as on access and use of implemented WASH products. The focus of the survey was on water connections since this component was not included in the MTR.
- Group discussions with village heads and households on community developments in water access, sanitation, and GEDSI across the community.

The household survey was conducted in 6 of the 9 targeted provinces, which are highlighted on the map below.



The provinces, districts, communes, and villages that the field visits (for HH survey and village heads and HHs group discussions)

Kampong Cham Province	
Chamkar Leu District	
Svay Teab Commune	Speu Commune

Trapeang Beng Village	Vealry Lech Village	Svay Teab Village	Popreng Village	Peaeng Meas Cheung Village
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Takeo Province				
Daun Keo District				
Baray Commune		Rokar Kraov		
Chroy Prakhor Village	Thomort Tbong Village	Prohout Village	Tado Village	Souchan Village

Prey Veng Province				
Kamchay Mear District				
Smaong Cheung Commune			Kranhong Commune	
Thnolkeng Village	Tean Phleung	Kouk Preal	Kravan Village	Pongro Village

Pursat Province				
Bakan District				Pursat
Ou Ta Paong Commune			Metoek Commune	Chamreoun Phal
Ou Ta Paong Village	Anlong Kray Village	Bat Kokir Chas Village	Chen Tay Village (Double pit latrines)	Don Ey Village Water Safety plan

Kampong Chhnang Province				
Samaky Meanchey District				
Sethey Commune				Tbaeng Khpos Commune
Wat Sethey Village	Peareach Village	Boeng Leach Village	Angkrong Village	Sresa Village

Tboung Khmum Province				
Kroch Chhmar District				
Peus Muoy Commune				
Peus Muoy Commune	Trea Commune	Svay Khlaing Commune	Preak A Chi Commune	Kroch Chmar Commune
Saoy Pii Village	Trea Ti Bei Village	Phum Tiu on Village	Phum Ti Muoy Village	Khsach Prachhech Kandal

The HH survey was undertaken by a consultant team using Kobo Toolbox. The questions were taken from the questionnaire used in the II grant survey with 440 HHs on WASH situations, to allow for some comparison and increased sample size.

3.2 Sampling

Survey with HHs: Respondent numbers for the female / male household survey (at least 150) will be a 5% sample of the 2,967 community members who have been connected to a pipe water scheme. HHs

that received double pit latrines number 140 and these are located in Pursat province. Seven (5%) HH with these latrines will be visited from one village. 540 received “products” to support a water safety plan. Similarly, 7 community members received such “products” from one village in Pursat province will be interviewed as part of the evaluation.

A selection of 206 female and male beneficiaries have been selected from the list provided by TN/EMW. From each of the 6 provinces, one district was selected (if more than one existed), and from each district 6-7 villages were selected from which to identify potential survey respondents. From the selected villages, HH names were randomly selected but with a focus IDP-1 and with a greater emphasis on female beneficiaries (56% are female) within the list of potential respondents. The number of potential respondents in each village is 7 in most cases. This will enable the interviewers to complete one village per day (i.e. up to 7 respondents), as well as interviews with other stakeholders as part of the evaluation process. Annex 2 shows the list of HHs that participated in the endline evaluation survey.

Group discussion with village heads and HHs: One group meeting was held in each commune visited. Where possible, representatives included female, and a person with disability. Annex 3 shows the list of village heads that participated in the group discussions.

Interviews with CCWC: 30 CCWC women were selected from the list of 51 CCWC women who participated in WOBA. The list was provided by the EMW Cambodia program implementation team.

Annex 2 shows the list of all people that participated in the HH survey, interviews, and group discussion in the endline evaluation.

3.3 Limitations

There are several limitations with the methods employed, which are summarised below.

- Phone Interviews with other representatives of WOBA partner organisations and local authorities, and WASH businesses were conducted by the consultant team. However, it appears that these interviewees were confused about which project is being evaluated and were referring to other NGOs and projects rather than WOBA. Their interview data were thus excluded from this endline evaluation report.
- The CWA representatives, the key delivery partner of WOBA’s water component, declined to participate in the endline evaluation. Their reason is that their contract with EMW Cambodia had been terminated at that point in time, and that they had participated in previous evaluation studies conducted by EMW.
- Due to limited data, no comparative analysis of data could be undertaken to identify similarities or differences within and between different stakeholder groups and beneficiary groups across and within provinces. Findings in relation to the effectiveness and impact of WOBA Cambodia, and contributing factors to achieving outcomes, impacts and sustainability, therefore were drawn from the HH survey, MTR and other studies that had credible evidence to respond to the key evaluation questions.
- Timeline for the Endline Evaluation and data collection and analysis is short with little time for detailed analysis. To mitigate this, the focus of the HHs survey was on the water component. Information relating to sanitation and other WOBA components was based on existing monitoring data and research reports and the MTR.

- There is no baseline data for whole project, which limits the comparisons between the baseline and endline to assess changes/impacts under WOBA. This is partially mitigated by asking participants to reflect on their situation prior to WASH installation.
- Only some indicators (mainly WASH latrine and sanitation outputs) have targets. This makes it difficult to measure effectiveness in terms of activities' achieved targets. Therefore, this evaluation report identifies what relevant activity was performed and the outcomes that the activities can be classified as fitting with. No claims can be made as to whether the activities underpin the ToC (see MTR) and contribute to the outcomes.
- Some HH and village respondents may be difficult to contact due prior commitments or incorrect contact details. The process for communication with the selected HH will also be commenced by the TN/EMW team in Phnom Penh. Some HHs that could not be contacted were replaced by spare samples or from the remaining HHs in the list if the spare samples were not enough. As much notice as possible will be provided to these respondents to enable them to prepare for the visit to their HH.
- Some concepts within WOBA, eg gender and women's empowerment, social inclusion, may lack definitional clarity which may mean that these are interpreted differently by consultant enumerators/interviewers (who are not familiar with WOBA) and respondents. The evaluation report draws on the survey with HHs which is specific to WASH products implemented rather than GSI. The latter is analysed based on research studies that have specific analytical framework and conducted in more rigorously to ensure data quality.

4. KEY FINDINGS

4.1 Relevance

This section addresses [KEQ1: How relevant is WOBA to government's policies in reducing inequality in access to WASH access in rural Cambodia?](#)

4.1.1 *Alignment of the WOBA activities and outcomes to NAP priorities*

Three out of five intended outcomes promote and contribute to equitable WASH services for the poor and socially disadvantaged. The outcome 3 on the number of built latrines for the poor/near poor and GESI HHs contribute to equitable WASH services for the poor and socially disadvantaged at the household level. At the business level, outcome 2 also contribute to equitable WASH services for the poor and socially disadvantaged through the strengthened private sector ability in sanitation and public/private enterprises in water to operate sustainably and reach poor and GESI communities in rural Cambodia and increasing their role in providing high quality WASH services to all.

WOBA Cambodia's activities and outcomes align with the Strategy and NAP I and II in the following ways.

- The strategy of partnering with government agencies namely the MRD, PDRD, DORD, Commune Councils and other organisations follow the Strategy's outline of institutional arrangement. WOBA's provision of training to these agencies seem to align with the Strategy. However, WOBA does not aim to build capacity in technical knowledge and skills in WASH services at any specific

level of government; rather to provide information about the project's subsidies and beneficiaries so government partners can coordinate mobilisation and WASH services uptake.

- WOBA's OBA method of delivering WASH services is clearly aligned with the Strategy's services and output indicators in the area of sanitation marketing and WOBA's triggering events at village levels, social mobilising and triggering, building onsite sanitation (pit latrines) measured by number of latrines built for eligible households.
- WOBA's engagement of the private sector follows the Strategy and NAPs. As with the government training, the training provided to private sector water operators and sanitation supplier seems to be about mobilising them through information provision about the rather than providing training on specific aspects of entrepreneur such as financial management skills of businesses which are noted as limited in the Strategy. There is no consideration of financing mechanisms by WOBA project for the businesses, both in ToC and discussion with WASH businesses to be able to fund capital of WASH services and poor households to afford these services.
- The cross-cutting issues of gender and social inclusion noted in the Strategy and NAP II are introduced in WOBA through targeted households (half of the target beneficiaries are from poor and GESI households). The identification of the poor households seems to follow the process outlined in the Strategy. WOBA's attention to gender-based needs also follows the Strategy particularly in the MHM training. However, WOBA has not included both men's and women's concerns in its design, implementation, monitoring and evaluation of policies and service delivery in all political, economic and social aspects, which was noted by the Strategy in relation to the Gender Mainstreaming Action Plan 2006–2010 to be weak in both content and implementation.
- WOBA project clearly addresses gender equality ambition of the Strategy in its incorporation of the CCWC as the mobiliser for its latrine and water services and hygiene promotion. WOBA's aim of women in leadership in CCWC and in the sector seem to align with the idea of institutionalised gender equality in the sector stipulated in the Strategy.
- The focus of mainstreaming disability is assumed rather than explicit in WOBA's GESI categorization of HH eligibility to receive subsidy in WOBA. There is one model of latrine which is a simple and cheaper model rather than designing a range of products with features and functionalities to accommodate PWDs. WOBA includes Disabled people's Organisations (DPO) in the project in terms of raising awareness about PWD's rights and needs to the project partners. However, they were included or represented in any consultation process, committee or advisory board in the design of the project, design of WASH products, and verification process of WOBA.

The extent to which WOBA can contribute to long term outcomes of the Strategy and NAPs depends on a number of factors outlined in the Strategy. In this regard, it is not clear and seems highly unlikely that the project contributes to 1) protection of water resources particular from poor sanitation including effective O&M to ensure a reliable service, 2) effective enabling environment, with appropriate legislation, information, strong institutions with clear responsibility, supportive attitudes and political will; 3) effective management information systems; 4) recurrent funding for provision of capital to provide WASH services and household take up. Finally, although there is a potential of WOBA to bring about appreciation of the economic, social and health benefits by all stakeholders and beneficiaries, it is unclear to what extent this is attended to in the project design, implementation and monitoring.

WOBA's theory of change include five outcomes which matched the W4W Fund-level theory of change and end-of-program outcomes.¹ In each of five program outcomes as noted in the ToC, the interventions were designed according to the strategies of the project although many strategies are more like project activities. As a result, there are many overlaps in strategies (or activities) and indicators across the 5 Outcomes, and there is no M&E framework linking the strategies/activities to outputs, outcomes or impact (see MTR report). It appears that the Fund's EOPOs were used in the original conception of the Project Design to allocate the various activities of the project to meet the overarching goal of the W4W in improved health, gender equality and well-being of Asian Pacific communities through inclusive and sustainable WASH.

4.2 Efficiency

This section addresses [KEQ2: To what extent has the project provided good value for money?](#)

4.2.1 WOBA's financial costs

WOBA' subsidies are paid at two levels: 13USD for ID Poor 1 & 2 HHs, 30USD for HHs that are ID Poor 1&2 and has a GESI categorisation. The subsidies have been effective in reaching WOBA's targets of poor/near poor and GESI households' latrine uptake and water connections. It helps improve the WASH situation in the community, particularly in sanitation coverage.

In addition, WOBA pays 11.5USD to 13.5USD performance incentives to the government at various levels for each latrine completed (Table 1). It could be said that this provides economic incentives for the government to mobilising HHs, and therefore for WOBA to reach its WASH targets.

¹ Outcome 1: Strengthened national and subnational WASH sectors system with greater emphasis on gender, social inclusion, safely managed WASH and water security; Outcome 2: Increased equitable, universal access to and use of sustainable WASH services, particularly for marginalised communities and community members; Outcome 3: Strengthened gender equality and social inclusion in households, communities and institutions; Outcome 4: Strengthened use of new evidence, innovation and practice in sustainable gender and inclusive WASH by other CSOs, national and international WASH sector actors.

Table 1. Performance incentive paid to partner for each completed latrine completion (per project plan)

Partner/stakeholder	Amount
MRD-DRHC	1.5 USD
Provincial/District management	2 USD
Provincial/District mobilisers	7 USD for poor/GESI 5 USD for non-poor
Commune Council/CCWC	1 USD
Village leaders	2 USD

Table 2. Number of HHs that received subsidies to build latrines and connect to piped water service

WASH products	Number of households reached through WOBA
Single pit latrine	27,192
Double Pit Latrines	140
Double Pit Latrines Upgrade	399
Total sanitation	27,731
Water connections	2,967
Total water	30,698

Table 3. WOBA actual costs in AUD (based on AUD:USD exchange rate of 0.7)

Categories	Funded by DFAT (under WfW)	%	EMW co-contribution
Performance incentives	661,203.59*	18%	38,278.87
Subsidy paid	693,850.28**	19%	36,861.13
Field activities cost	848,953.25	24%	295,381.13
personnel cost	874,507.10	24%	273,992.27
Administration	406,762.89	11%	
All other costs	123,334.96	3%	
TOTAL AUD	3,608,612.08	100%	644,513.40

*Also includes incentives and allowance aid to volunteers (169,365AUD), and costs of supporting PWG group meetings (26,114AUD)

** Subsidies paid for latrine was 482,128AUD; for water was 221,722AUD

4.2.2 HHs' contribution to build latrine and connect to piped water service

Results from the survey indicate various amounts of contributions by the HHs in the water (Fig 1) connections although they were supposed to only pay 10USD (cost of water connection if 70USD, EMW subsidy is 30USD, supplier subsidises 30USD).

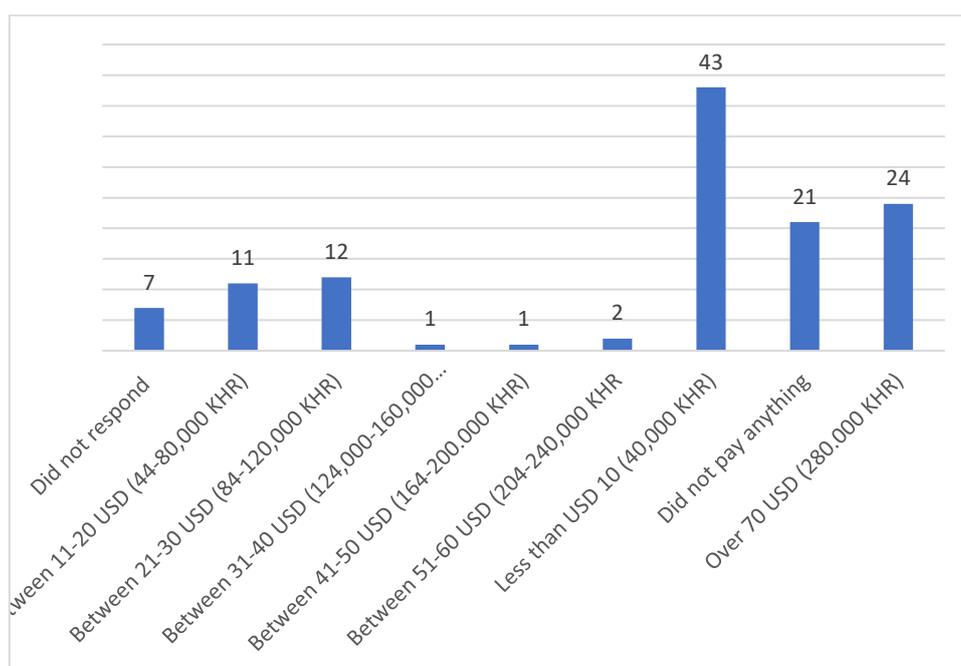


Fig 1. Financial contributions by HHs connecting to piped water service

Of these 122 HH respondents, 57% said it was the right amount, 17% said it was too much, 5% was unsure, and 2% would have agreed to pay more, 17% reported they paid nothing. This suggests that for this ID poor group, there is still an affordability problem, which supports the WASH suppliers' comments.

There were only 8 HHs that built single pit latrine the end line evaluation survey sample. Of this 8, 1 person paid less than 10USD, 1 over 70USD, and 1 between 41-50USD. Of this 8, 5 said it was the right amount, 1 did not pay anything, 1 was unsure, and 1 did not respond.

Based on the report of EMW's verification results of 3810 HHs on latrines built, 96% reported they self-funded their latrine building. 52% spent under \$100 to build their latrines. A further 27% (1,372 HHs) reported to have spent between \$100 and \$200 and 18% (947 HHs) spent between \$200 and \$500 to fund their latrine construction.

4.2.3 OBA payment process

Regarding the OBA process, as reported in the MTR and the subsequent OBA payment review process, the implementation the program across 9 provinces did present systemic challenges. The provision of Output-based Aid (OBA) was undertaken in a range of different and unmonitored ways. There were different methods for incentive payment and rebate payments. There was a need for clearly defined and consistent implementation processes that were understood by all partners, but this common understanding did not seem to be in existence.

The project is designed using a partnership approach between EMW and the government and between EMW and the suppliers to meet the targets for the installation of latrine and the established water connections (see MTR for governance structure). The introduction of the project to communities was done by the RSCC, PDRD, DoRD and CCWC/VF, and varied across provinces, to conduct orientation on the importance of latrine construction. There also appeared to be some confusion about WOBA's role in some communes when other NGOs are also providing the same services (UNICEF, iDE, charities). In fact, most of the village heads and HHs interviewed in the endline evaluation were not aware of who EMW was. Similar to the findings of the MTR, the local communities were confused between who funded the subsidies, who actually gave them the subsidies payment, and who they had to pay cost of building latrine or paying water connections WASH to. The various amounts that they actually paid for WASH also supported the interviews and group discussion about subsidies payment and WASH installation costs.

The CCWCs were required to verify that rebate payments, by holding payment receipts, were made to poor HHs. This responsibility in itself seems to imply the need to be able to hold their own CC to account for the delivery of these payments and for the transparency of selecting and supporting HHs choosing to be part of the program. This ability to ensure procedural and financial compliance required a capacity to put party politics to one side. However, even though considerable training was provided to the CCWC cohort, it seems that at least some CCWC were unaware of the GESI scheme, only some could confirm the CC contribution, and some were confused about the various partner roles in the program's implementation.

Performance incentives

Compliance to procedure seemed to be an issue with this and other key processes. Government at the Provincial and District level received a "performance incentive" for the number of latrines constructed for ID-P and GESI families who have registered or the construction of the latrine and have this verified. Apparently incentive payments were provided straight to the CCWC / VFP (rather than to the district / provincial levels) but this was not a common process across all participation provinces. Village level incentives of \$3 for CCWC and \$2 for VFP were not forthcoming in many cases. The purpose of the incentive payments seemed to encourage government partners to meet the installation targets set and these incentives may have contributed to a degree in encouraging these achievements. However, it is not clear how such incentives promoted transparent management processes or whether they served any kind of role in promoting GEDSI, as intended in the project. It is not clear, for example, at the national / provincial level who held the \$7 incentive for each latrine constructed, what this incentive was for and how it was to be used.

Subsidies and co-financing

Rebate payments for IPD-1 & 2, and other HHs who could be within the GEDSI domain, were designed to encourage equity in acquiring the benefits of latrines and safe water and seemed to be a shared responsibility of EMW and Commune Office but it seems that contributions from CCs were inconsistent. Some funds at least seemed to remain in the Commune Investment Plan (CIP) budget because ID-P rebates seemed to vary from between \$2.50 to \$7.50 rather than the expected \$13.

It seems there was no evidence that rebates have been provided to IDP 1&2 from the RSCC accounts. There was no financial audit conducted by EMW, which is different to WOBA Vietnam where payments of the subsidies were audited annually, and co-financing payment were tracked by EMW. This process gap was noted in DFAT's compliance audit of Thrive/EMW, as well as the MTR which was submitted to the Fund, although no further action was required by the Fund or DFAT.

Documentation/records

The extent and consistency of record keeping seemed to be a major concern in project management. Rebate/incentive receipts were not forthcoming from the organizations who had the responsibility for managing this process and there was no apparent record transparency. It seems that funds were transferred to EMW partners for distribution to HHs who were registered but there was some variation in the subsidy payments process. The Provincial Department of Rural Development (PDRD) seemed to have responsibility for registering those who built latrines for such subsidy payments, but documentation did not support the consistency of this process. The project mid-term report and the subsequent OBA payment review found that “the range of transferring rebates and incentives payments (i.e. receipts) has no proven documents for national down to provincial / commune level. All partners received payments either by bank transfer or checks (in some cases). There were no receipts of documents that substantiated that such payments took place in all provinces. On top of that, the payments for incentives have also no receipt or documents provided at district or commune level.

In terms of water connections, the findings from the OBA payment review re-enforces the critical issues identified in the MTR in terms of the use of ID Poor eligibility criteria, lack of clarity in the fund transfer between levels of government, lack of proper documentation of latrines and payments that affect accountability transparency and probity. For example, the process requiring a signed agreement between Cambodia Water Association (CWA) and EMW which included a payment schedule from signed agreement to the inspection of the connections did not seem to be documented. EMW advised that the CWA regularly submitted list of water connections connected to EMW. After receiving the list, EMW team conducted verifications and/or spot checks. Then, EMW produced the reports. EMW issued the payment to CWA based on the contract. However, it was not clear how the subsidy of \$30 from EMW for connections was made to IDP households, how the process for the suppliers subsidy (\$30) was managed, and how HH contributions of \$10 was managed.

In summary, although the targets for WASH products were met in the sanitation component, it is unclear whether OBA as a model could be systematically implemented in these communities. One of the claims of WOBA in terms of system strengthening (Outcome 1), is the project’s OBA model and efforts to advocate for co-financing agreement Commune Council level. For this outcome to be achieved, the OBA processes must be designed and implemented with clearly defined target outputs, transparent incentive and subsidy schemes, and with audits and monitoring of financial transfers and processes in order to have integrity and accountability of all partners involved. The question of “value for money” rests not only on the targets achieved, but who within the project and wider system have gained financial benefits or vested interests as a result of the project, and what it means for future financing.

4.3. Effectiveness and Impact

This section addresses 2 KEQs with regards to the 5 EOPOs:

1. [To what extent were the outcomes \(as per ToC\) achieved and what are factors influencing achievement and non-achievement of these outcomes?](#)
2. [What are the changes as results of WOBA at the household, community, business and government level?](#)

4.3.1 Project Theory of Change

The WOBA Theory of Change (ToC) contains an overall goal, 5 intended End of Project (EoP) outcomes, 15 target results, 6 intended Intermediate Outcomes, 13 intended Short Term Outcomes

and 26 Implementation Strategies. Overall, the ToC seem an ambitious undertaking and, while aligned with the policy intention of the Royal Government of Cambodia (RGC), contains terminology that lacked clarity. Terms like “strengthened private sector”, “Smart Enterprise”, “pro-social traits”, “steward the private sector”, “social enterprise”, “collaborative peer-learning”, “systematic participation”, tailored messaging” and “disability inclusive approaches” were not defined and seemed to depend on implementers’ personal understanding of these concepts. The document lacks a clear model (beyond the Smart Enterprise model) to demonstrate how the project components were interlinked to provide a rationale for such alignment. Such a visual model may have been useful in better grasping a concept of the overall project. However, this itself may have presented challenges given that project processes varied across provinces and were managed by various process owners including government, non-government, community and business participants – depend on the location.

As discussed in the MTR report, the lack of “logic” between planned activities and intended outcomes and outcome measures suggest that the ToC assume that:

- “Training” facilitates behavioural change – especially the ToT process whereby participants, when “trained” will adopt the intentions the training and put them into practice.
- Financial incentives are required, or at least advantageous, as a means of motivating government commitment to the project and the project would be less effective without such “incentives”.
- Partner organizations (government authorities, NGOs, private sector, local business owners) and community members have shared, or similar, aspirations of the project outcomes.
- Local “service providers” ought to have, or acquire, an altruistic business philosophy which reflects a special consideration for disadvantaged community members.
- Project participants have a common understanding of the range of concepts and terms that are used to describe and explain the project.
- The project can be implemented through a culturally neutral model – that is, the theory for change can be developed outside of local community beliefs, values, and expectations.
- Engaging women as training providers, mobilizers and service providers will have an impact on gender equity and women’s empowerment at the household level, participation in terms of domestic roles, family decision making and broader community participation.

According to the project ToC and workplans, all activities have been implemented. However, it is difficult to evaluate whether all outcomes have been achieved at the end of the project, mainly because of the lack of clear outcome indicators that link to the activities. Only Outcome 3 had clear indicators of built latrines and installed water connections. The remaining outcomes do not have targets or indicators. Moreover, there is no baseline data (including quantitative and qualitative data) to evaluate what and how changes were expected or measured as a result of the project interventions. This is quite unfortunate, and although the MTR had suggested a number of recommendations for baseline data collection and log frame development, none of the recommendations were implemented, and a log frame which was developed for Year 4 activities had limited measures and data collected.

The remaining of this section thus lists the targeted results of WOBA activities and discuss them broadly within the EOPO that they were classified in the ToC.

EOP-1: Strengthened national and sub-national WASH systems with government able to implement and sustain inclusive output-based aid WASH approaches in rural Cambodia

There are two broad sets of expected results. Firstly, relevant ministries at national and sub-national level supportive of WOBA approaches to help GESI populations access WASH services. Secondly, Ministries are willing to advocate and secure government budget for the poor/marginalized to

access WASH. Based on ToC and EMW’s project reports, the following outputs were expected and achieved. Except for the incentives payment paid to partners that were confirmed with Thrive/EMW finance team, no data was provided to support to substantiate the results:

Output targets	Results
1300 village triggerings and household education on WASH for GESI	No information
216 Commune Councils implemented WOBA	216 commune councils implemented WOBA
148 CCWC received guidelines on WASH for GESI	6 CCWC (based on information provided by EMW)
34 district administration attended training and received guidelines on WASH for GESI	34 DA (based on information supplied by EMW)
92,000USD performance incentives paid to partners	661,204USD paid (based on information supplied by Thrive Networks Finance)
8,530USD co-financing paid by 212 commune councils	No data (see above section on OBA payment process)
100 pagodas mobilised (by 49 commune councils and 615 village chiefs) with average 75-250USD contributed per pagoda	147 pagodas mobilised by 49 CCs and 615 village chiefs (based on data supplied by EMW). No data relating to pagodas’ fund was provided.

Partnership and OBA payment structure

As discussed in the MTR, the partnership structure of WOBA follows the government system, and is an appropriate model. From the perspective of government partners, it allows for various levels of government to work with each other because they are working within the same structure and position of their own work, and some had previously worked with EMW Cambodia on output-based latrine project. The latrine targets could be achieved because they had all understood this to be the core objective of the project. From the perspective of the suppliers, partnership structure provides an easy connection and cooperation with the focal points in different levels.

However, there are different project governance structures across provinces and for sanitation and OBA payment processes are not transparent in terms of incentives payment and subsidies transfers between different levels of government and to the HHs. As found in the OBA payment review, in Pursat, EMW has contracted RSCC, a local agent or a self-declared rural sanitation company, to implement the output-based aid (OBA). This rural company was working in 34 communes and one Sangkat to provide education to villagers in collaboration with CCWC and VFP. For latrine installation, they worked with laborers/masons in those local communes and Sangkat to supply latrines to villagers —both ID poor/GESI poor and non-ID poor households. RSCC was the key player to manage rebate payment in its own bank account and provided incentive payment to CCWC and VFPs as well as claiming budget from EMW. They used laborers/masons to collect all payments for latrines that were not part of the rebate payment, from the villagers—both ID poor/GESI poor and non-ID poor households.

In Kratie, Kampong Cham, and Prey Veng, EMW worked with PDRD. Then, PDRD worked in a vertical structure of governance to implement the OBA by providing rebate payment to masons, no direct (rebate) payment to ID poor/GESI poor households. For Kratie, PDRD provided rebate payment directly to masons (latrine suppliers), but distributed incentive payment to CCWC directly. Then, CCWC provided the incentive payment to VFP under their juridical administration. This practice was not the same in Kampong Cham and Prey Veng where they had a central support at the district level, known as DoRD to implement the OBA. In these two provinces, DoRD managed all rebate payment and incentive payment. Instead of paying rebate payment to ID poor/GESI poor households directly, DoRD paid the rebate payment to masons.

The payment of incentive payment (to the local government and VFP) was only utilized in one commune (in Kampong Cham) and none in all visited communes (in Prey Veng) had the incentive payment application.

The process of transferred rebate and incentive payment (i.e receipts) has no proven documents from national down to province and commune level. All partners received the payment either by bank transfers and checks (in some cases). There was no receipts or document that substantiate that such payment took place in all provinces. On top of that, the payment for incentive has also had no receipts or document proven at districts or commune level.

Subsidies payment

The subsidies payment based on completed latrines performance was implemented in all the four provinces investigated in the OBA payment review. Such implementation was, however, not consistent in all visited communes; most importantly the rebate payment scheme for GESI poor households and the shared contribution from commune offices were rarely evident. For the rebate payment to ID poor (i.e \$13), it has been almost evident, implemented in all visited communes. This (i.e \$13) rebate payment for ID poor was consistent in Pursat and Kratie (see Table 2). However, there are some inconsistencies in Kampong Cham and Prey Veng. In Kampong Cham, this scheme was implemented in two communes, but the other two communes had the rebate payment in between \$2.5 and \$7.5 for ID poor. No GESI poor's rebate payment was identified in three communes (in Kampong Cham).

In Prey Veng, two communes visited have never received rebate payment from EMW or DoRD. They did mention receiving the subsidy from iDE of \$45. This could be because they were confused between iDE and EMW or they just simply didn't know who the NGO was. The other two communes showed some kind of evidence of receiving rebate payment from DoRD for the (i.e \$13 for ID poor households).

The rebate payment for the GESI poor households is critical for improving access of latrine construction for extreme poor households, meeting the criteria of support. The amount of rebate payment for the GESI poor is \$30 (clearly stated in the OBA procedure). Such support was not consistent according to proven evidence from all communes (see Table 2). In Pursat, all CCWC and five out of six VFPs did not know this scheme. Only one VFP realized that there was some support for extreme (GESI) poor households for latrine construction, so villagers only paid only labor cost (i.e about \$10) for latrine constructors. That was a few years back (appropriately) in 2017 which is prior to WOBA. The rest of the CCWC and VFP interviewed did not know about this GESI poor support scheme.

In Kratie, the rebate payment for the GESI poor was more evident. There were supports of the GESI poor in the first stage (in between 2017-2018 which is before WOBA) when the GESI poor required paying only labor cost (i.e about \$10 or \$15) of latrine construction. This scheme, however, was not evident in the following years which is WOBA.

In Kampong Cham, the GESI poor support was only proven in one commune. The rest of the three communes have provided no records of the GESI poor rebate payment scheme. CCWC and VFP did not realize that such GESI poor rebate payment scheme was provided in their locations.

In Prey Veng, two communes also did not realize this GESI poor rebate payment; however, the other communes did realize this payment when it was only in the initial stage of the project.

There were also difficulties to get a clear picture of mobilizing the GESI poor rebate payment in two provinces. First, reason was that there were many different resources mobilized to build latrines, attempting to get ODF in Prey Veng and Kratie (i.e only floated commune). In Kratie, many organizations (i.e UNICEF and other charities—from Muslim communities abroad) channeled funded via subsidies to building elevated latrines for ID poor households. So, CCWC and VFPs did not realize which schemes were either from UNICEF, charities or EMW); however, those subsidy projects might have different phases. In Prey Veng, DoRD played the role to collect all resources (i.e mobilized from Buddhist temples, commune offices) paying for latrine constructions. There were also some organizations (i.e iDE organization) implemented (i.e two visited communes). In those communes (i.e four in Prey Veng and one in Kratie), ID poor paid only about \$10 or \$15 per latrines for the former, and even a few hundreds for the latter (i.e floated communities for elevated latrines in Kratie).

OBA is a key component of WOBA and the intended outcome is that the government can implement and sustain the OBA model post WOBA, then a systematic process and procedures should have been considered, implemented and monitored, and training on OBA should have been provided to all partners and the communities. Moreover, the RSCC, a major sanitation supplier who is in charge of all sanitation suppliers in Pursat, is also the WOBA focal point for this province and therefore received incentive payments from EMW. This dual role is a conflict of interest, and the lack of proper and transparent OBA payment process (see above) compounds the risk in terms of financial probity.

Co-financing

An indicator of government commitment through WOBA is the Commune Council's budget support for sanitation subsidies. As found in the Ooba payment review, the co-financing payment from the commune offices was also implemented inconsistently (see Table 4). In Pursat, the CCWC confirmed the \$5 contribution from the commune offices. They stated the commune offices either used Wing, a local money transfer agent, to transfer the contribution of latrine payment from the commune offices to RSCC or latrine construction laborers from RSCC collected the contribution from the commune offices. However, the consultant could not find any evidence of such contributions when cross checking with other multiple sources. There were no evidence records of such transfer from the commune offices to the RSCC proven for verifications. Other sources provided were however, contradictory. In Pursat, there were only the figures of budget (i.e \$5) that were planned in the commune investment planning (CIP); however, there was no real transfer of those contributions from the commune offices to the RSCC or to the ID poor/GESI poor households for latrine construction as set out in the WOBA's project and its OBA procedure. In Kratie, this practice was the same as Pursat. Only figures of budget were planned in the CIP and were no actual contributions transferred from the commune offices.

In Kampong Cham and Prey Veng, there were varied in terms of co-contributions from the commune offices. In Kampong Cham, only one commune shared about \$20 per latrines for a few latrines per year. Other communes received some latrine donation support from Muslim communities abroad; however, it has never paid for latrine building from the commune budget. This practice, however, was not the same as other two commune offices in Kampong Cham where they had never allocated \$5 budget to share contribution for latrine construction. In these two communes, there was also only small subsidy provided by the EMW's project through DoRD, ranging from \$2.5 to \$7.5 per latrine (generally for ID poor/GESI poor). In Prey Veng, all commune offices have mobilized both its

budget (although the interviewees did not know the exact figure) and other resources (i.e village leaders and Buddhist temples) for latrines construction for ID poor/GESI poor households. All the mobilized resources were kept at the commune offices. At the point when latrine construction completed, the DoRD collected those contributions from the commune office and paid to masons. There were no exact figures of the commune budget and/or mobilized resources paid per latrine.

Table 4: Rebate (Subsidy) Payment and Co-financing Matrix

Rebate payment	Pursat		Kratie		K. Cham		Prey Veng	
	CCWC	VFP	CCWC	VFP	CCWC	VFP	CCWC	VFP
\$13	✓	✓	✓	✓	X/✓	X/✓	(?)/X/✓	(?)/✓
\$30	X	X/✓	X/✓	X/✓	X/✓	X/✓	X/✓	X/✓
\$5	X		X		X/✓		✓	✓

Note: () apply; () don't apply; (/) sometimes do not apply/others apply; ((?)/ /) don't know/don't apply/apply

In year 4, 40 household visits were conducted with partners to advocate for Commune Council funding towards WASH. The evaluation team is advised that there are official letters that document CC's budget allocation to ID poor HHs and poor plus GESI HHs as a result of these visits; however, they are in Khmer and have not been translated into English.

Discussion with the suppliers and HHs in other studies relating to WOBA found that there have been multiple attempts to advocate for the CC to commit to WASH in its budget in the past five years, but the priorities have always been infrastructure spending such as building and upgrading roads. This challenge in including WASH in the Commune Investment Plan (CIP) was corroborated with the PDRD of Prey Veng Duty Director in an interview during a field visit of the Fund Coordinator, and at the national level by the MRD Director.

Partners training

The results of 16 training courses and 16 refresher training courses to partners and stakeholders in Year 4 and 5 on Covid-19 prevention, WASH three key messages, latrine building and use, and MHH training show that there was an increase of participants who estimate their knowledge level of training topic to be at 75% or higher after the training, from 35% to 93% across four provinces (Tbong Khmum, Pursat, Prey Veng and Kratie). Furthermore, after the training, 84% of participants reported a 80% or more confidence level compared to 54% before the training.

A report on the three-day training in Year 4 on latrine construction in the challenging environments (e.g. flood prone, hard rock & clay soil areas), which took place from 15 to 17 November 2021, was completed. From the analysis, after the training there is a 25.31 percentage point of reduction in participants who selected "No confidence" and "Less confidence" as their answers to statements that asked them to self-assess their confidence level. At the same time, there is a 30.86 percentage point of increase of participant who reported "More confidence" and "Most confidence". There was a slight reduction of participants (5.56%) who reported neutral.

It should be noted that the survey was conducted by EMW implementation team who also carried out the training. No review of the survey questionnaire was conducted by the evaluation team.

ID Poor status and inclusion

WOBA uses the government list of ID Poor as a basis for orientation and village triggering, and to decide who are eligible for subsidies. In this way, WOBA follows the government and provides an appropriate rationale, as far as the government is concerned, for subsidies criteria, and for beneficiaries' identification. However, there is much contention among the local communities especially households in terms of its validity, because the list is viewed as a product of "personal

connections” rather than based on needs assessment. In addition, the lack of a systematic OBA process in the WOBA communities, which are dependent on donor “projects” for many basic social development needs, seem to intensify the nepotist view of projects’ eligibility and WOBA’s inclusiveness.

Given that all HHs that built latrine, at least those in the verification or evaluation sampling, did not have latrines prior to WOBA, it could be said that the project met an inherent need of the HHs; however, without a needs assessment or consultation with the communities, baseline data, or proper OBA process, it is difficult to ascertain whether the project has reached the neediest or how could it do so within the remit of an inclusive approach.

An issue of borrowing ID poor status for purchasing cheap latrines was also identified. Some households borrowed ID poor from others to purchase latrines. In such cases, for example, the ID poor households already had latrines, potentially provided by another organization. So, other families who did not have ID poor (although still have a medium standards of livelihoods) borrowed ID poor from others to buy cheap latrines – this was mainly in Kampong Cham and Prey Veng. These problems are likely to have occurred in the processes of latrine subsidy in the other provinces (i.e Kratie and Pursat).

The ID poor borrowing issue is an unintended consequence of using the ID poor lists, and that many HHs who have demand for latrine and wanted to build latrines but would not do so unless they have access to subsidized price. In a field visit for a survey of 440 HHs (II grant) that built latrine, about 20% of HHs on the EMW-supplied list of HHs that received subsidies did not actually build latrine. They “lent” ID poor card to their neighbors who did not have ID poor status so they could obtain the subsidy. The unintended effect of the OBA process is that some HHs received subsidies although they were not eligible for subsidies according to the project’s criteria of ID poor status.

Invalid name with ID poor in the list of rebate payment

Another issue observed was that some of the ID poor HH names on the list of rebate payment was not correct. For example, a woman as a household with ID poor lived and already shared latrines with relatives, but the woman had never built a latrine and received rebate. It was not sure why this woman’s name was recorded in the list under the rebate payment scheme (i.e in Prey Veng). This issue may relate to inaccurate process of recording rebate or relate to bigger issue of probity. A full audit of all latrines built is required to investigate the prevalence of this problem.

Impact at the government level

The success or effectiveness of WOBA’s involvement in the PWG particularly in advancing OBA through WOBA implementation could be another indicator for EOPO1. However, there are no minutes of the PWG and although EMW has been consistently commended by the MRD Director for having supported the PWG, it is difficult to understand the actual impact of WOBA and Thrive/EMW in this space.

Alignment to government’s policy directions alone seem to be the rationale for WOBA, and is thus supported by its government partners. Besides the issues noted above, without specific measures and baseline at the government level, it is difficult to assess what and in which ways WOBA has resulted in changes at the sectoral level. Although the government partners at all levels acknowledged the success of WOBA in terms of completed latrines for poor and GESI HHs in rural areas, and acceptance of the OBA model, they could not clearly articulate what changes at the sectoral level and how OBA can be implemented post WOBA.

The rate of latrine coverage (i.e communes with ODF) was high, with 62.50% of the total 16 communes in the four provinces had declared ODF in the past one or two years (see Table 4). Such

high proportion of ODF in the visited communes could be resulting from concerted efforts of the recent increased partnership between NGOs and MRD, trying to address the national action plan (NAP) for the universal coverage of sanitation and hygiene by 2025.

However, the inequality of wealth quantile remained an issue. Across the communes visited in this study, all had a few proportions of the households in the 16 communes, some ID poor households, that cannot afford to get latrines (see Table 4). Three communes (in Pursat), two communes (in Kampong Cham), and two communes (in Kratie) still had many more ID poor households who could not afford to build latrines. In Prey Veng, the issue of inequality of wealth quantile was low, having a few ID poor without latrines (i.e those who did not have land to build latrines or migrated households). The initiative of the PDRD, pushing the commune offices to mobilize resources and using commune budget for shared cost of latrine construction could have positive impact on reducing the inequality of wealth quantile in Prey Veng.

EOP02: Strengthen private sector to operate more sustainably and provide high quality WASH services to all in rural Cambodia; increasing their role in providing high quality WASH services to all

According to the ToC, the intended outcomes and how they were addressed in the project are discussed below, followed by a more detailed discussion on financial risks and viability of suppliers.

1. *Improved service offerings by private WASH enterprises and increased sustainability while explicitly targeting marginalized groups.* It is not clear how improved service offerings or increased sustainability could be measured without baseline data. All sanitation suppliers only offered 1 type of single pit latrine, and some in Pursat and Prey Veng had learnt how to do double pit latrine. Except for the RSCC in Pursat, all sanitation suppliers are masons with 1 or 2 people. Similarly, water schemes are all family businesses whose only product is piped water supply. They are certainly not enterprises. See below for further discussion on financial viability and the marginalized group as customers base.
2. *Increased capacity of District Authorities to steward the private sector –to coordinate and regulate water enterprises.* There are no activities to achieve this outcome. The CWA is EMW's delivery partner in the water component, who was responsible for selecting water suppliers into the project, managing their water connections targets for all provinces.
3. *Smart Enterprise partnerships with private enterprises that pay commission for latrine sales.* There is no commission paid for latrine sales by suppliers under WOBA.
4. *Water enterprises selected will demonstrate strong sustainability prospects as well as pro-social traits.* See below for a discussion on financial viability and marginalized group as customer base.
5. *90-100% of poor and GESI households within the network will connect and receive high quality water services.* Without baseline data for each service scheme, it is not clear what is the percentage of poor and GESI HHs have connected to their scheme's piped water service or had no water connections prior to WOBA. This was actually raised as a recommendation in the MTR however it was not implemented probably because of lack of funding and capacity of the water schemes and EMW. The CWA does not see its function in the project as baseline data collator. There is no customer services survey conducted in this project.

Based on the ToC and EMW's project reports, the following outputs (expected and achieved) in relation to private sector suppliers' engagement.

Output targets	Output achieved (based on project reports supplied by EMW)
<p>11 Female Water Operators (FWO) improved their capacity in water management and finance, leadership in water committees, compliance with the national water quality standard and regulations for staff management, and water safety planning</p>	<p>An online training on Water Safety Plan (WSP) was delivered to private water operators on November 5th, 2021. EMW conducted pre and post training surveys to assess changes in participant's response in relation to the following knowledge areas: 1) The definition of WSP, 2) Areas which should do the risk assessment, 3) The purpose of WSP, 4) Persons responsible for implementing the WSP, and 5) Knowing how to record and a make report of WSP. Save for knowledge area 4 where the percentage of participants who know who is responsible for WSP implementation is 75%, the remaining areas see a 100% of affirmation.</p> <p>An online training was delivered to fourteen water operators from 27th to 28th October 2021 with the aim of helping them build their capacities on basic accounting records, ensuring they will have the financial records keeping and produce financial reports in a timely manner. The survey questionnaires cover the following topics: 1) Knowledge on Basic Accounting Definition, 2) Basic accounting records and reports, 3) Knowledge on Advantage of Asset Register, and 4) Knowledge on cash management. Except for topic 2 and 3 where the increase of participant's knowledge is relatively small (from 72% to 79% and from 52% to 57% respectively), the rest observes a more than ten percentage point increase.</p>
<p>Water operators connected piped water service for poor and GESI HHs</p>	<p>2970 HHs (target of 3750) were connected to pipe water service by these water operators. To encourage water connection targets to be achieved, CWA ran a scheme to award the female service provider with the highest number of GESI poor and poor household connections being awarded with a bonus of \$1,500.</p>
<p>25 local suppliers, including 5 female suppliers, supported to build latrines for poor and GESI HHs.</p>	<p>Project engaged 27 sanitation suppliers (3 of whom were female in Kratie province). The suppliers were located in Kratie (12), Prey Veng</p>

	<p>(5), Pursat (8). Tboung Khmum (1), Kampot (1) and Kampong Speu (1). Of these 27, 5 were women.</p> <p>All latrine targets were achieved across the provinces.</p>
EMW delivered training to local masons on how to build double pit latrines	2 Double Pit Latrine Training sessions attended by 21 participants.
WOBA had partnered with the CDPO to deliver training on inclusive WASH and provide hygiene promotion and handwashing materials.	<p>This was initiative of the COVID-19 pivot. 35 DPOs/ 63 DPOs were conducted. Each DPO received 1 box of face mask and 20 sheets of Covid-19 prevention leaflet for dissemination of inclusive WASH and Covid-19 prevention in communities.</p> <p>Interviews with the CC members including the CCWC found that they were trained in disability inclusion by WOBA and other NGOs working to promote PWD' Rights and in collaboration with government agencies like the Provincial Planning Department, DRD, PDRD and Provincial Department of Women's Affairs. PWD women who participated in MHH training were g funded by WOBA. The CC and CCWC then disseminated the knowledge about the PWD inclusion policy and PWD rights within the community through awareness raising activities. Broader training on other topics had touched on PWD in a few local dialogues, but disability inclusion was not broadly discussed with the community due to C19 pandemic. 5 (out of 30 CC women interviewed) said that there had been no training in disability inclusion</p>

Financial viability of water operators

The findings from a survey with 9 water operators in WOBA indicated that the top three financial risks they encountered were water pricing and tariff, lack of management skills and capacity, high investment costs. These risks all affect their cash flow, profitability.

The finding that water pricing and tariff is a major barrier is not consistent with the literature in Cambodia as well as the literature of water suppliers elsewhere which sated the risk has declined in importance over time. The mid-late 1990s structural reforms have resulted in the divorce of policy formulation, service provision and regulation for the sector. The establishment of PURC has reduced the degree of political infiltrations in tariff setting and adjustment for water services (Ameyaw and Chan 2015b). Some qualitative evidence has emerged indicating that the burden of regulation – including tariff caps and heavy administrative requirements – is an issue (Grant et al. 2018).

Low demand and consumption of water, Water pricing and tariff, Water theft, were more likely to impact on the business ability to achieve full cost recovery. Water losses, lead to higher costs of operation. This is in line with an unpublished report of 3i 's report that most of piped water suppliers had poor performance in implementing mechanisms to prevent water loss of the pipe network and their pipe network management is not acceptable.

These operators also faced a skills-gap in operation management leads which hinder their ability to meet water quality standards, conduct acceptance testing, face operational difficulties, and high operation costs. Inflation raises the cost of production and operation and impacts the business's loan repayment (most suppliers surveyed were heavily indebted with high rates of interest). High energy costs make cost of water servicing high.

For these suppliers, loan from the bank is a reasonable solution although taking loan also associated with risk if the borrower can manger their loan well and fail to pay back. Therefore, these suppliers suggested that EMW provides some financial literacy, along with other capacity building. Lower interest rate is also a reasonable solution to ease the debt burden. One more solution to ease the burden high operation cost is on-time water bill payment by the users and raise the price of clean water. However, raising the price of clean water may not be easy, because it is regulated by the government regulations.

Households' reluctance or inability to pay for water supply affects these businesses' revenue. This may stem from the low awareness of the importance of clean water. Therefore, the respondent request for government or NGOs like EMW to helps promote health to people to return to clean water.

Despite these risks and impact on their businesses, six of 9 surveyed water suppliers reported that they were financially viable. Three were financially viable for the next 1-5 years; three others were financially viable for the next 6 - 10 years. Other 3 suppliers were not sure about their financial viability. This is comparable to SEVEA's (2017) findings that the economic viability score of piped water suppliers in Cambodia was three on a scale of 4, indicating that they are economically sustainable, but not at the highest level.

Financial viability of sanitation suppliers

According to 17 WOBA sanitation suppliers surveyed (1 is female), the top three financial risks were low demand for sanitation product/services, lack of capital to start-up and business expansion, and household (user)'s affordability. All three risks had negatively impacted the respondents' business's cash flow and therefore profitability in the past 4 years. Low sales price and high transportable cost especially in remote areas also results in low profit margins.

The risk factor that impacts on achieving full cost recovery is Lack of households' (user) education and awareness raising to promote benefits of latrine. This indicates that the households' awareness of benefits of latrine is still limited despite WOBA's efforts in raising awareness about WASH through the village triggerings and CCWC mobilization efforts.

Another risk that impacts on full cost recovery are the business's inability to attract commercial lenders because they have limited experience with and understanding of the sanitation sector, although this is only for some suppliers who wanted to expand their business or to fill in the cash shortfall from non-paying customers. and High interest rate associated with loans makes it difficult to service the loan.

Household subsidies affect willingness of households to pay for latrines, as beneficiaries wait for a subsidy-based intervention. This is also evident in the Woba's MTR stating that affordability is the issue that could undermine the latrine uptake and connect to water. Even with subsidies, the cost of

latrine is still very high for many poor people. For elderly people and people with disabilities, it is very difficult to save even a small amount because of ongoing basic needs.

In addition to all the above risks, the suppliers have to be committed on their to find client and find additional jobs to diversify their source of income.

14 of the 17 interviewed water suppliers reported that they were financially viable. 11 were financially viable for the next 1-5 years; three others were financially viable for the next 6 - 10 years. Other 3 suppliers were not sure about their financial viability.

Providing services to poor and GESI HHs

Only 5 water suppliers out of 9 surveyed reported that they would continue to provide their services in the long term. Three said they would not, and one said that they were not sure.

Thirteen out of 17 sanitation suppliers reported that they would continue to provide their services in the long term, three said they would not, and one said that not sure.

EOPO3: Improved access to and use of equitable WASH services, especially among marginalised community members

The original targets based on ToC for latrine were 30,000, comprising 12,250 ID Poor HH, 5,250 ID Poor and GESI HHs, and 17,500 non-poor HHs. The revised targets and actuals at WOBA completion are shown below:

	Total Target HHs	Total HHs Achieved	Total subsidies paid to HHs in USD
ID Poor	12,446	12,446	\$174,640
GESI	6,631	6,631	\$307,141
Non poor	8,115	8,115	-
Total	27,192	27,192	\$479,533

In addition, 140 HHs built double pit latrines, 359 HHs (target of 399) upgraded to double pit (target of 399). The subsidies paid in total were 3,500USD.

For water connections, the original target based on ToC is 3,750 HHs. 2,970 HHs were connected to piped water services. The total subsidies paid to the HHs from EMW was \$214,766. The contribution of the water suppliers to HHs (theoretically should be \$30 per connection) cannot be calculated due to lack of documentation (see OBA payment process section above)

Access and use of WASH products installed

Survey with 165 HHs in 19 communes during the evaluation field visits which focused on HHs with water connections indicate that:

- 72% were using piped water as their main source of drinking water; 11% were using dug well, 4% were using surface water, 5% were using bottled water, 2% were using tube well, and 2% were using stored rainwater.
- 94% said that water supply was always available.
- 91% said that water quality was acceptable. Those that said it was not acceptable were not sure why it was so. 56% said they were boiling the water to make it safe to drink.

- In 74% of HHs, women or girls collected water, although they spent less than 1 minute a day doing this as the water source is in their property. Without baseline, it is hard to know whether having water connections had saved time although this could be assumed.
- There is no significant different in term of source of water used for drinking water and for other domestic uses.
- 63% said the service was completed on time and 21% said it was completed earlier than expected. Only 4% said completion was late.

These results can be contrasted to the survey with 440 HHs that built latrines. For this group:

- the main source of drinking water is tube well or borehole, follow by stored rained water, pipe water outside of the household dwelling, bottled water, and surface water such as river, stream or lake.
- Most of HHs have water access in their yard or in their household dwelling. Only 19.6% has to collect water from elsewhere. About 58.4% of the respondent mentioned that female adult in their household is the person who responsible to collect water while 2.4% mentioned it was responsible by children aged below 15.
- Regarding the availability and quality of the water, 66.2% of the household mentioned that water is always available from their main source, 10.9% mentioned that water is available most of the time, 22.2% said water is available for some time, and very small % of the households mentioned that water is not available. In term of water quality, at least 25.8% of the respondent mentioned that the quality of water from their main source of water is not always acceptable. The main issues relating to perception of unacceptable water quality are color, smell, or taste, hardness, and presence of material which particularly occurred during flood period.
- The most common choice for households to make their drinking water safer is boiling. Other choices include use water filter, add chlorine, buy bottled water, collect and store rained water and let water settle on its own.

The situation of sanitation for these 440 HHs was reported as follows:

- Flush or pour flush pit latrine is the most common type of toilet facility used by household in the study areas, which account for about 81.1% of surveyed households. Other types of toilet such as pit latrine with slab and twin pit latrine with slab are also commonly used by the community. Only 85.3% of the toilets has supper structure, the remaining are just toilet bowl without cover.
- Only 0.7% of the households has toilet facility that connect with septic tank.
- At least 7.3% of the household does not have toilet facility.
- At least 5.9% still practice open defecation into bush or field.
- 79.67% has toilet facility in their yard, while 20.33% have the toilet in their dwelling.
- About 14.4% of the survey households share their toilets facility with others who are not their households' member.
- At least 3.1% have ever emptied their pit latrine. Among them, 45% mentioned that the content was emptied to an open environment such as uncovered pit, open ground, water body or elsewhere.
- 11.1% of the survey household mentioned that their family members are not able to access toilet facility at all the time. Additionally, among all the survey households, about 18.2% mentioned that they face some risk while using toilet. Common risks include risk of harassment, fear of insects/snake, and health risk.

For the 165 HHs in the endline evaluation survey, of which only 8 built latrine under WOBA 56% never emptied their latrine, 23% emptied and buried in a covered pit, 2% in their own backyard, 5% elsewhere, 1% used a pit emptying service, and 8% did not know.

Subsidies

Of the 165 HHs surveyed in the endline evaluation survey, 12% said they did not receive a rebate, 21% said they received 30USD, 33% said a range of amounts from 5USD to 50USD, and 30% were not sure. 40% were unsure whether they received the actual money even if they could state the subsidy amount, 29% said an NGO gave them the money, 16% said the service provider gave them the money, 8% said the commune council, and 3% said other funder. This finding aligns with the earlier discussion on the OBA payment process.

WASH information

In terms of awareness raising, 51% attended a training or promotional event, 28% received some information. 62% thought that the training or information was provided by the village heads, 75 said the CCWC had given the information, 13% received information from members of the family or community.

Only 28% said that the WASH information provided to them was always clearly explained; 26% said they always felt encouraged to learn more about WASH; only 8% said that the presenter promoted WASH for persons with disability, 15% said that it was safe for them to share their views or ask questions. These findings are similar to the MTR interview with HHs and the recommendation that WASH information can be better compiled and shared to HHs, and follow up with HHs after WASH installation.

39% of the 165 HHs received invitation to attend the training but could not go, and 18% were unsure. This is an inconsistency within the responses, but it suggests that more attention and efforts in raising WASH awareness at the HH level could be done, a finding that aligns with the WASH suppliers’ perception of low HHs’ understanding about WASH which impact their WASH uptake.

Benefits from WOBA

Fig 2 shows the benefits that these HHs reported as a result of having WASH service installed.

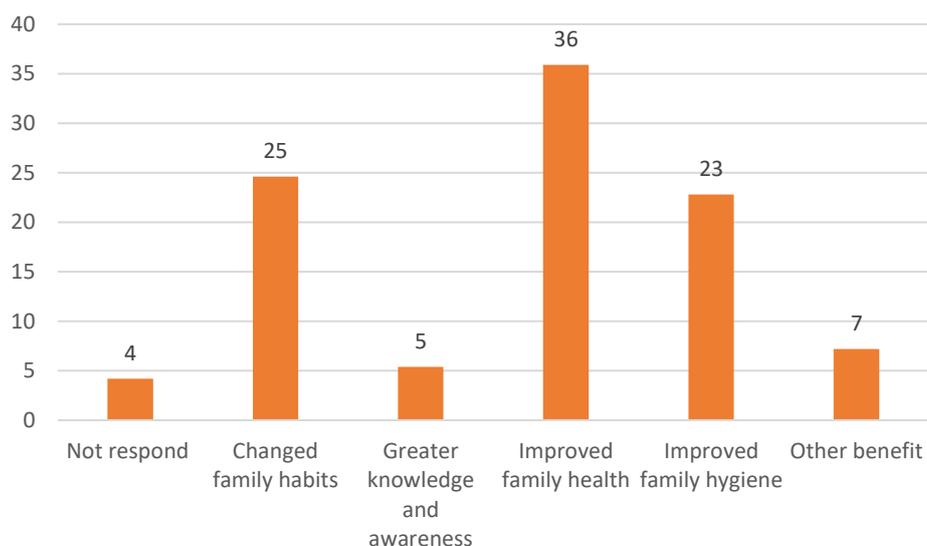


Fig 2. Benefits from WASH product installed

83% said that WOBA benefits everyone equally, those that said no or were unsure said that the people with disability or ID poor received more subsidies than them, although they did not know the amount of subsidy. When asked whether WOBA benefits women and men equally, 83% said yes and 11% were unsure. Those that said no claimed that women received more training and more support in WASH education and promotion.

In terms of decision making, 52% said that responsibility in the family have changed in the last 4 years since WOBA. However, when asked what the changes are, almost everyone referred to knowledge about benefits of WASH and changed WASH behaviour like access to water, drinking safe water, washing hands.

During the field visits, group discussion with 24 village heads and members offered similar findings to the survey results. They cited the following hygiene benefits.

- Improved IDP HHHs' need of safe water, although sometimes the water was cut off because of breaks in main water pipelines.
- Clean water is used in every household but some families were still using the pumping wells
- HHHs are no longer worried about dried up wells in dry season.
- The community, especially women and girls, children have clean water for their daily consumption and in the bathroom and feel safer because of the hygienic latrine.
- Women and girls have an understanding of the advantages of good personal hygiene and good sanitation during menstruation.
- Household environment is better off in terms of cleanliness.
- Local authorities are enabled to work with community members to conduct promotional campaigns and events on WASH.
- Local people know how to lay cement floors for the water-jar site as part of water and sanitation and build simple double pit latrines with slab.
- Majority of population have increased knowledge on safe water and sanitation. First of all, villagers learned from each other about clean water. This is very effective learning among villagers, and encouraged them to access water.
- Through commune council meeting, WASH needs were discussed, and strengthened local collaboration (village/commune) with TN/EMW
- There are toilets in every home, access to clean water is now much simpler and people now live much better lives.
- Some community members actively joined WASH meetings

In relation to water connection costs and subsidies, some village heads mentioned that the subsidies are necessary because 240,000 KHR was too much for poor HHHs. They were aware that the full price for water connections was 79.75, and that ID poor, and GESI HHHs only paid 10USD, but they were unclear about who had to pay the remaining costs.

The CCWCs interviewed also noted positive change with regards to understanding and practice WASH especially changed behavior of throwing out hygiene pads in Lngieng Commune, Tbong Khmum District, Tbong Khmum Province. In Chiro 1 Commune, Tbong Khmum District, Tbong Khmom Province.

“Women and girls in my commune are feeling safe from the abusing, violence in the families and receiving counseling processes in the community by CCWC. Most women and girls in the commune are practicing good personal hygiene and sanitation regularly. Women and girls are using latrine all the times at home and at their works. They have soap in their bathroom and sanitation pads for using during their menstruation period”.

In Thlork Vien Commune, Samaki Meanchey District, Kampong Chhnang Province 80% of women and girls understood and applied sanitation during their menstruation including body hygiene. In the past about 40% managed that themselves.

Other change included the greater use of soap for hand washing. In Phnov 2 Commune, Sithor Kandal District, Prey Veng Province there had been a Huge difference as a result of WASH training. Almost all women and girls had changed to wearing clean clothes and to maintain a clean house, sleeping arrangements, food and water. They knew how to wash their hands regularly with soap. changes in the wearing of clothes, eating habits and handwashing.

In Svay Chor Cheb Commune, Basedth District, Kampong Speu illness had been reduced with lower number of mosquitos and flies More hygienic habits like wash their hands or how to take good care of their children.

According to the CCWCs, women and girls had access to clean water for HH consumption and bathroom use and have hygienics latrine nearby their homes. They were practicing good personal hygiene and use soap and sanitation pads during menstruation. Women and girls were safer from abuse and violence in their families and receive better health care at HC and through counseling processes in the community by CCWC. They were becoming healthier and cleaner themselves through practicing good personal hygiene daily and good sanitation around the houses. They were using soap in their bathrooms and sanitation pads for using during their menstruation. w\Women and girls had stopped defecated around the houses, stopped throwing the litter everywhere and were practiced good personal hygiene.

Only three CCWC indicated that they had not observed any change.

Factors contributing to achieved outcomes

EPOPO 3 was achieved in terms of WASH access and use, especially among marginalized community members, given that the 70% of total HHs that built latrine were ID poor and GESI, and all of HHs that connected to water were ID poor. The extent to which this proportion is compromised by the issue of borrowing ID poor card is not known and therefore this result should be interpreted with caution.

The enabling factors for achieved outcomes are:

- Good coordination between various partners, Village Chief, and focal points
- Genuine participation of poor villagers who were willing to access and build toilets for improved sanitation and hygiene.
- EMW has good collaboration with local authorities for mobilizing local community to participate in WASH program. Without a local authority, it would be difficult to mobilize people. The local authorities encouraged IP/EM communities to participate in all the commune activities, including WOBA WASH promotion.
- During the WASH / WOBA promotion, all of women in IP/EM families joined meeting and MHH training regularly the same Khmer women.
- CC urged village leaders to make a list of the elderly aged 60 and over because they are considered an “at risk” group and the government will issue at risk group card (like the IDP Card) to them.
- Subsidies for latrine construction and water piped connection were provided to PWD and the elderly.

The factors hindering outcomes, particular in HHs’ WASH uptake are:

- Some IP/EM Islam women were not willing to change their culture practices on Reproductive Health.

- Some families remained unchanged and believed that latrines were not necessary. Some community people were envious of the contribution to support the elders HHs to complete the HH latrine and clean water connection. Some families remain unchanged regarding their behaviors in doing open defecation. They believed that toilets were unnecessary. PWD/ EM HHs were slow to change behavior, especially women and girls with limited freedom of choice
- Some poor families were reluctant to build the toilets first when their houses are likely to be renovated or rebuilt.
- Limited participation was influenced by the need to support families by providing labor service for income.
- ID-P people didn't understand about WASH at the beginning due to lack of sufficient awareness raising events at the onset. At the point where they understood EMW had already left the community after a few months of its operation. Some people didn't really care with WASH and had a lack understanding and participation with the project activities from the outset.
- PWD HHs in the commune had not improved because they had no capacity to earn an income.
- Information about subsidies for GESI HHs did not reach them so there was a perception that there was no program interventions in social inclusion of PWD or for the wellbeing of elderly in some communes. Welfare / wellbeing for the elderly received less attention, however the government started to get the local authorities to engage with the elderly and orphaned children in the community so that they're well informed.
- Many ID-P didn't want the kind of pit latrine as the only option provided by EMW.
- Some PWD HH needed an upgraded hygienic latrine, but there were limited funds and construction was delayed. Some PWD, IP/EM HHs wanted the upgraded latrine which took a long time to complete due to costs.
- ID-P HHs who are unable to pay for their latrine construction cost and had no rebates. This is particular for elderly people
- Local authorities don't have enough budget to support PWD or the elderly.
- PWD project has been created and was a government social service to support elderly people but funds are limited.
- Covid was very challenging, and affected HH economics the most. For example, farming was negatively affected during C19 such as products was not able to find markets, and debts were increased among local people. This trend will not be addressed in the short period, and make them less care about sanitation and hygiene or education of their children.
- Sectoral departments at the district level are less involved in the program in some locations. The roles of District PDRD and Health was not strong or clear to collaborate with Commune Council and NGOs operating in the community.

EOP-4: Improved gender empowerment and systematic inclusion of women and outcomes in households and communities and institutions

The targeted results based on ToC are:

1. **700 female volunteers mobilized and trained as demand generators and market builders.** According to the information provided by EMW, 1,400 female volunteers mobilized and trained as demand generators, market builders, and WASH business operators in July to October 2020. However, the evaluation only has record of 6 female volunteers in WOBA and no information on training of volunteers so it is unclear what kind of training they may have received, or who are the 1400 volunteers referred to.
2. **Women in households receive tailored messaging.** This target has two broad sets of expected results. Firstly, there is a target of MHH training reaching 5,400 women and girls. These HHs

subsequently constructed toilets. MHH training participants gained knowledge about the notion of hygiene, the consequences of poor hygiene during menstruation and the importance of latrines and bathrooms for women and girls to use during menstruation.

According to EMW project report, MHH training has reached 5,292 women and girls, although there was no list or data to support this number.

According to a report prepared by the MHH trainer in Prey Veng in year 4, there were 918 participants in Prey Veng, and 100 persons took part in a pre- and post-training survey. The results of the survey indicated that more than 80% of participants reported they have gained knowledge in various areas, including for example what hygiene is, the consequences of poor hygiene during menstruation and the importance of latrines and bathrooms for women and girls to use during menstruation.

Another survey was conducted by EMW implementation team in 20 villages of three Sangkats of Chamroeun Phal, Lolork Sar and Roleab, Krong Pursat, from July 18 to August 10, 2022.

Interviewees also reported learning a lot about hygiene practice from this study, especially the following topics: what needs to be applied with good hygiene during menstruation, what kinds of food to be fasted during menstruation/why fasting/why not fasting, what nutrition is, what the essential foods that women and girls need to eat during menstruation, what the consequences of poor hygiene practice are during menstruation, and when the bacteria can penetrate uterus & why. Many of the interviewees were satisfied with this study as they participated in the interview and additionally learned from the wrap-up session.

According to the interviews with the CCWCs who were involved in MHH training and promotion, while some women and girls gained more understanding of MHH the changes that occurred were inconsistent.

Secondly, educational messages were disseminated to women in households to improve their knowledge about WASH services and information about WOBA, presumably by CCWC or volunteer community members; and a target of 1600 female-headed HHs who participated in village triggering meetings to build hygienic latrines and / or connect to piped water supply. Based on data provided by EMW, 252 women HHs built latrine.

WOBA's project reports of gender indicators to WfW showed two indicators. The first indicator of women in leadership role in WASH was 235 female commune council members and 7 female district deputy governors who are responsible for WASH. WOBA's target was 148 (70% of the 212 commune councils) are female councils or CCWCs who lead WASH. However, it is unclear to what extent has WOBA supported these women to become Commune Council members. In addition, there is lack of data to support the number of 235 women commune councilors. The list of CCWCs given to the evaluation team for interviews contain 51 names, while another list of CCWCs given to the research team to conduct a survey on women empowerment had 317 names.

WOBA reported on the second indicator of women in technical management role as 235 CCs and 19 female water operators and 9 female sanitation suppliers who engaged with WOBA. Our discussion with WOBA water suppliers indicated that the female water operators are actually a family business in which there is a woman (eg wife, daughter). The target suggest female led business, but it seems that in some cases, the woman has an equal role to the man and in most cases the father or husband are actually in charge and make the business decision. Care should be taken in interpreting this target as women's economic empowerment. In fact, interviews with

the CCWCs indicate that most women are empowered to promote WASH because of their pro-poor attitude and empathy for the marginalized communities rather than for increased economic opportunities. Similarly, the discussion with women water operators suggest that their economic situation is quite dire, especially as a result of subsidizing HHs' water connection fees.

Role of the CCWCs

Based on interviews with the CCWCs in the endline evaluation, the role of the CCWC in the project included:

- Raising awareness about WASH to community members in order to enable all households to have safe water and latrines.
- Partnering with EMW/WOBA to educate the community people especially women and girls on WASH promotion and practicing in the family and in the communities.
- Counseling women on family planning/birth spacing, practicing good personal Hygiene during menstruation and reproductive system issues.
- Collaboration with village Leaders to educate the community on WASH promotion and practices in the family and communities.
- Awareness/dissemination at village, commune and district level focused hygiene and sanitation among young girls, in particular safety for girls.
- CCWC raised awareness about the MHH to community members especially women working at garment factories, and follow-up and monitoring of daily practices of women and girls on MHH
- Some reported raised gender awareness to community members while others did not
- The CCWC raised awareness about disability inclusion to community members after receiving training at district level.
- The district team in collaboration with CCWC to raise awareness about gender equity to community members.
- Gender equity was also mainstreamed in meetings facilitated by some CC members and CCWC.

Enabling factors for reaching women at the HH level

According to the CCWCs, there were many positive aspects of WOBA that helped women at the HH level especially those socially or geographically disadvantaged, to understand how they could access WOBA.

1. Focal points had been created at provincial, district, commune and village levels as the communication protocol although these focal points were not well equipped with ways of communicating and working together. At this level they used Telegram groups among focal points or telephone numbers. At the community level, the Commune Council directly communicated through Village Chiefs with assigned tasks/jobs like community mobilization and organizing local events/disseminations. Focal points existed provincial, district, commune and village levels although these focal points were not well equipped with ways of communicating and working together. CCWC and focal persons visited women's houses to encourage them join the MHH training and to encourage them to consultation with the HC on reproductive health.
2. CC / VC cooperation: CCWC usually sought support from village leaders in communication with these women. Village leaders always gathered community members at a place in the village for meetings with CCWC. However, some Village Chiefs lacked understanding and participation with partner NGOs. Some sectoral departments such as PDRD, Women's Affairs went directly to the community with Village Chiefs and CCWC's Focal Points.

3. Community visits: Local authorities/ CCWC used loudspeakers and hire cart to conduct the campaigns/ events on WASH. They also use photos/ pictures to demonstrate the topics for educations/ events but community members rarely raised concerns. This process also included home visits to women in remote areas to encourage them to participate in the WASH promotion program. Some CCWC made monthly home visits to consult with women who lived at the remote areas. CCs also mapped women's locations / homes in order to conduct home visits by every 3 months to women living at the remote area to encourage them to participate in the WASH promotion program and discuss on their needs.
4. Water connection advice: Through the advice provided, disadvantaged women understood how they could seek support in connecting piped water. The CCWC communicated with these women through village leaders Telegram group.
5. Social media: Women communicate through hand phone when they needed help or through Group Messenger in Facebook. Announcements from the governor, commune authorities, NGO and were made via TV and some officers went to the households to give advice or teach the community.
6. Relationship with the community: CCWCs had established good relationships with villagers through direct HH contact to answer their questions. There believed there was a need to build close relationships with community women so that they felt safe enough to share their concerns.

“As long as I have a good relationship with the women they are willing to share everything. It means when I know their problems I help them on time” and “We have good communication with women and their family members. We have built close relationships with them and regularly visit their houses to see how they have been. They are also brave to share their concerns to us and we help by giving them suggestions”.

7. Dispute Resolution Committee helped to resolve community problems.
8. Training provision: WOBA provided a lot of training and women were encouraged to join as often as possible. Community women could access the program through the training provided by MoWA as well as through the local Health Center.
9. Women's groups were formed, and the Group Leader was able to contact women/group members easier and faster. These groups were formed in “blocks” - 3 groups per village - and selected Group Leaders as communication personnel. Group leaders contacted women living at the remote areas. This approach featured reflection meetings with women in small groups to discuss women's concerns and needs in order to find common solutions. Women in the community communicated more with each other than with their husbands or male relatives because they felt embarrassed to talk about their personal health them.

Challenges for women at the HH level

According to the CCWCs interviewed, the women (at the HH level) are concerned mostly about their hardship and drunken husbands beating their wives and children, lack of food to eat or their residential area is located at the dumpsite, having too many children, being too poor, problems of domestic violence and unemployment or their husbands illegally migrating outside the country for work. Women with many children in the family found difficult to manage financially. They lacked vocational skills and received less of income from businesses at home and at the market.

Regarding attending WASH information session, some felt that women in the HHs were concerned that they would be forced to talk or report about their family during the training or commune meeting. Moreover, some men in the community still don't understand much about gender equity

and still have a mindset that women are inferior to men in everything because only men can go to work and earn income to support the whole family.

“Most women stay at home looking after their children without working to get incomes - the one who earns income is their husband. The husbands may not allow their wives participate outside their HH or even go to the market. Husband will buy their requirements themselves but often didn't purchase the items that were most needed. In order to address this issue, CCWC members and the commune encouraged husband to join the trainings as it would teach them to keep an open mind to allow their wives to make friends and to participate with the training provided”. (CCWC Chair, Tropeang Preas Commune, Prey Chor District, Kampong Cham)

EOP-5: Evidence and innovation in gender and inclusive WASH in Cambodia contributing to regional and global evidence base

WOBA produced the following learning products:

- 2x Implementation guidebooks/toolkits
- 2x Best practice summary guides
- 80 books and banners developed to promote WOBA
- 1 x research report of the FSM pilot of alternative dual pit latrine
- 2 x research reports on climate change and adaption (II grant)
- 4 x learning notes from mid term review
- 2 x policy analyses on gender equality policies and financial risks of private sector suppliers in Cambodia
- 1 x poster for double pit latrine for FSM onsite treatment
- 1 x report of verification results of WOBA up to Oct 2022

These knowledge outputs were written in Khmer and English and shared with WOBA's partners through telegram. It was indicated that the double pit latrine and MHH training content were taken up in the National Guidelines for WASH. It is not clear whether the other learning products were read or how they were used by the receivers.

At the regional level, the knowledge products were also shared with the Fund Coordinator of WfW in annual reports. It is not clear whether the other learning products were read or how they were used by the WfW. However, they do not seem to be included in the Fund's collection of published/shared knowledge outputs or referred to in the outputs produced by WfW.

4.4 Sustainability

This section addresses [KEQ6: To what extent are WOBA's outcomes sustainable at the community, business and government level?](#)

At the community level, the outcomes of hygiene practices are likely to be sustained. The ability of HHs to take up WASH seem limited given the affordability issue of the poor and vulnerable HHs, and still limited awareness about WASH in the communities as noted by different sources.

At the suppliers' level, it seems that if EMW is phased out, there would be no technical maintenance for the built latrines and limited access to technicians to build new toilets, in particular facilities protect PWD and the elderly population. In addition, most suppliers encounter low demand issues in WASH uptake, and view HH subsidies as a way to attract HHs to purchase latrine and connect to water services. However, the issues affecting their financial viability are beyond HH subsidies eg water theft, high operational costs, lack of access to capital, which are not within the scope of WOBA. Most said that they were financially viability and would continue to service poor and GESI HHs.

Although the government partners at the national and provincial levels were highly supportive of WOBA and OBA, there is no indication that they would continue the WASH service delivery without development partners funding; nor is it likely that they have the capacity to design and implement proper OBA procedures. At the commune level, there is some evidence that the CC will partner with other NGOs to provide refresher training on social welfare and social inclusion to the CC, CCWC and VL. The CC will request DRD, PDRD to provide the refresher training on Gender Empowerment /Equity, which will be integrated with CIP as agreed at the CIP integration Plan meeting.

5. LEARNT LESSONS AND RECOMMENDATIONS

5.1 Learnt lessons

1. To achieve the goal of social inclusion, it is necessary to design the different subsidy levels to ensure all disadvantaged HHs can access to equal WASH services.
2. Communication strategy including different activities with different methods should be designed and conducted from the beginning of the project.
3. The involvement of the local authorities is very important to direct the village heads to involve the project.
4. The project interventions should be attached to the commune investment budget.
5. There are various ways to enhance GESI (particularly for the PwD and the elderly) to support them to access and use latrine and clean water. It is necessary to introduce them to HHs at the beginning of the project. It is also important to explain WOBA's concept of GESI and defined principles of GESI to all partners and HHs.
6. The targets for outcomes/outputs/interventions and baseline data are very important to serve evaluation and should be developed in a M&E framework in the project design.
7. Specific GEDSI measures should be carefully considered and incorporated into the ToC
8. Specific private sector support measures should be carefully considered and incorporated into the ToC.
9. EMW and local authorities should design the project with sufficient support and resources at the local communities' level with the focus on mass awareness and combine WASH approaches with livelihood improvement and support in order to help poor families to startup. WASH is not a single approach - it has to be combined with livelihood improvement.
10. Partnership could consider collaborative initiatives with other CSOs whose work focus on vulnerable communities, and through local government's systems and processes to focus on agriculture and livelihood improvement, combined with WASH approach in order to attract vulnerable people such as PWD to really engage in these processes.

5.2 Recommendations

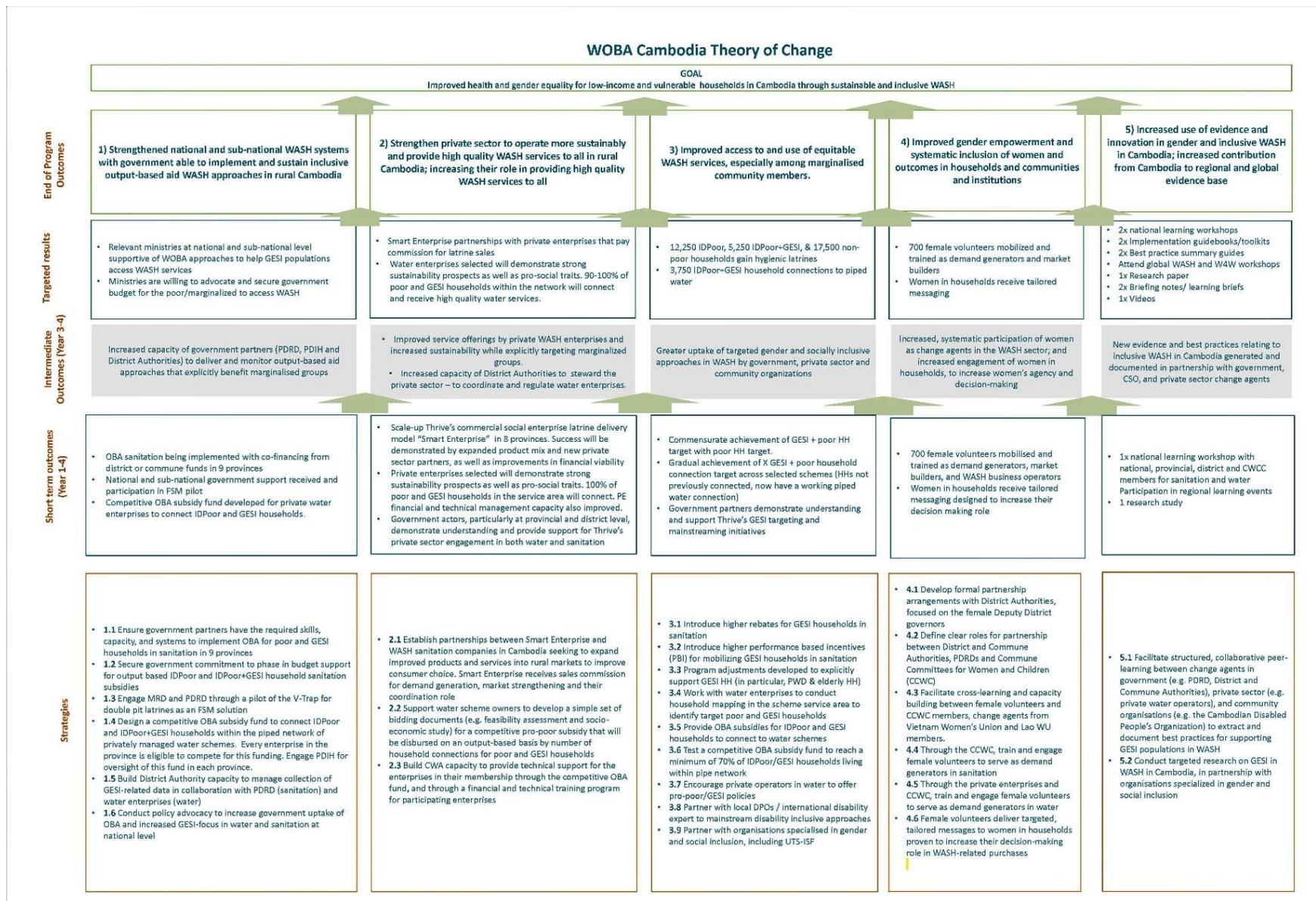
To sustain the results and effectiveness of the interventions under WOBA

- Continue to conduct the WASH education and awareness raising activities beyond the project. The communication should focus on using latrines properly, using water safely and effectively.
- Outreach activities should continue at the community and HH level, in particular at the school. Topics would include MHH, hygiene and sanitation, clean environment at the school, community and home, gender and safety for girls.

To apply the OBA approach to increase WASH uptake,

- It is critical that the OBA payment procedures are established and implemented at all levels of implementation and all partners levels, and monitored frequently by an external party to the implementation team.
- Financial audits should be conducted regularly by qualified personnel for all fund transfers from Thrive Finance to EMW Cambodia to its partners.
- Develop and test the OBA models with different levels of subsidies and resources based on different levels of needs. IDP and GESI are the most vulnerable people, and they do not have any financial means to contribute. So, an OBA model should ensure full support with a small contribution from the poor families to engage with and benefit from the project activities.

Annex 1. WOBA Theory of Change



Annex 2. List of people interviewed and surveyed in the endline evaluation field work

	Name	M/F	Position	Organization / location	Individual OR Group	Date
1	Kim Hor	M	Lead Facilitator, Country Director,	EMWF Cambodia	G	03/11/22
2	Iv Bunthoeun	M	Facilitator, WASH Program Manager	EMWF Cambodia	G	03/11/22
3	Soon Sekheng	M	Facilitator, Business Manager	EMWF Cambodia	G	03/11/22
4	Kry Vongpisith	M	Facilitator, WASH Officer	EMWF Cambodia	G	03/11/22
5	Khonn Lydo	M	Deputy Director of Department of Rural Health Care	Ministry of Rural Development (MRD) Phnom Penh	I	10/11/22
6	Mao Chhunheang	M	Deputy Chief of Office	Provincial Department of Rural Development Prey Veng	G	03/11/22
7	Hor Longdy	M	Officer	Provincial Department of Rural Development Prey Veng	G	03/11/22
8	Vorn Monyviny	M	District Director of administrator of Welfare Office	District Administration Prey Veng	G	04/11/22
9	Nhem Sarith	M	District administrator Deputy of economic and development	District Administration Prey Veng	G	04/11/22

1	Mout Pheary	F	Economics and Community Development Official	District Administration Prev Veng	I	05/11/22
1	Sorth Sreynet	F	WASH Focal Point	Samaky Meanchey DA, Kompong Chhnang Province	I	9/11/22
1	Chhai Kim Yeik	F	WASH Focal Point	District Deputy Chief, Tboung Khmum	I	07/11/22
1	Chhean Sokly	F	WASH Focal Point	District Administration, Tboung Khmum	I	07/11/22
1	Peng Se	M	Village Chief #4	Svay Khlaing Commune, Krochchhmar District, Tboung Khmum	I	16/11/22
1	Sim Matt	M	Village Chief	Ropheap Bram Commune, Tboung Khmum District, Tboung Khmum	I	18/11/22
1	Sles EfyAn	M	Village Chief	Trea Commune, Kroch Chma District, Tboung Khmum	I	15/11/22
1	Keng You Hout	M	Commune Chief Leader	Boun Village, Svay Khlaing, Krochchhmar District, Tboung Khmum	I	16/11/22
1	Khon Savary	F	WASH Focal Point	District Administration, Tboung Khmum	I	07/11/22
1	Chhoem Lang	M	Governor Officer	Provincial Department of Rural Development	I	07/11/22
2	Khum Saroeun	M	First Deputy Sangkat Chief	Sangkat Roka Krav, Duan Keo District, Takeo Province	I	16/11/22

2	Hor Long Dy	M	Rural Health Care staff	PDRD Prey Veng Province	G	10/11/22
2	Mao Chhun Leang	M	Deputy Chief of Rural Health Care office	PDRD Prey Veng Province	G	10/11/22
2	Kong Sok Bora	M	Sangkat secretary	Sangkat Roka Krav, Duan Keo District, Takeo Province	I	16/11/22
2	Khiev Sokhom	M	CC Chief	Kranhung Commune Komchay Mear District, Prey Veng Province	G	16/11/22
2	Chhoin Rasmey	F	CC member	Kranhung Commune Komchay Mear District, Prey Veng Province	G	16/11/22
2	Lim Sopheap	M	CC member	Kranhung Commune Komchay Mear District, Prey Veng Province	G	16/11/22
2	Lang Hong	M	Project Assistant	CDPO	I	07/11/22
2	Mean Svauth	M	Village Chief	Veary Lech Village, Kampong Cham	1	17/11/22
2	Hang Suy	M	Village chief	Village authority, Kampong Cham Province	1	15/11/22
3	Som Yan	F	CCWC Member	Romlech Commune, Bakan District, Pursat	I	04/11/22
3	Khun Sen	F	CCWC Chair	Chiro I Commune Tbong Khmum	I	05/11/22
3	Yuos Sokunthea	F	CCWC Chair	Tonle Bit Commune	I	04/11/22

				Tbong Khmum Province		
3	Toek SaLis	F	CCWC Chair	So Sen Commune, Prey Chor District, Kampong Cham Province	I	08/11/22
3	Moy Phallang	F	Owner, Tumnub Cheung Prey Private Prey Water Supply	Cheung Prey Commune, Batheay District, Kampong Cham	I	04/11/22
3	Chin Sopheap	F	CCWC's focal point (5 yrs.)	Prey Kmeng Commune, Phnum Sruoch District, Kampong Speu	I	10/11/22
3	Ty Naisom	F	CCWC (1 st commune chief)	Damrel Commune, Ou Reang Ouv District, Tbong Khmum	I	10/11/22
3	Bun Srim	F	Chief of Healthcare Office	PDRD, Prey Veng	I	11/11/22
3	Van Kimseng	M	Owner, Samrong Private Water Supply	Samrong Commune, Svay Antor District, Prey Veng	I	11/11/22
3	Kong Siek Hour	F	CCWC Chair	Angkor Ban Commune, Kangmeas District, Kampong Cham	I	10/11/22
4	Srey Ouch	F	CCWC	Steung Chey, Chheung Prey, Kampong Cham	I	11/11/22
4	Huot Chenda	F	CCWC Member	Svay Chor Cheb Commune, Basedth District, Kampong Speu Province	I	08/11/22
4	Srey Mach	F	CCWC	Prey Nhy Commune, Krong Pursat District, Pursat Province	I	11/11/22

4	Muok Ya	F	CCWC	Kork Kong Leach Commune Kanchreach District Prey Veng Province	I	11/11/22
4	Ung Kimyeng	F	CCWC	Lngieng Commune, Tbong Khmum District, Tbong Khmum Province	I	10/11/22
4	Loek Rong	F	CCWC	Sethey Commune, Samaki Meanchey District, Kampong Chhnang Province	I	11/11/22
4	Phann Pang	F	CCWC	Sralob Commune, Tbong Khmum District, Kampong Chhnang Province	I	10/11/22
4	Khnun Sen	F	CCWC	Chiro 1 Commune, Tbong Khmum District, Tbong Khmum Province	I	10/11/22
4	Kim Mon	F	CCWC	Tbaeng Khpos Commune, Samaki Meanchey District, Kampong Chhnang Province	I	10/11/22
4	Yin Sirann	F	CCWC	Peam Ror Commune, Peam Ror District, Prey Veng Province	I	10/11/22
5	Va Sophal	F	CCWC	Koh Mith Commune, Kampong Siem District, Kampong Cham Province	I	11/11/22
5	Soth Sov	M	CCWC	Thlor Vien Commune, Samaki Meanchey District, Kampong Chhnang Province	I	10/11/22

5	Chhin Vanna	F	CCWC chair	Khvit Thom Commune, Prey Chhor District, Kampong Cham	I	08/11/22
5	Yin SaMoeun	F	CCWC Chair	Tropaeng Preas Commune, Prey Chor District, Kampong Cham	I	08/11/22
5	Nhim Kim	F	CCWC	Khnor Dambong Commune, Cheung Prey District, Kampong Cham Province	I	07/11/22
5	Yuos Soundhead	F	CCWC	Tonle Bith Commune, Tbong Khmum District, Tbong Khmom Province	I	08/11/22
5	Sam Yan	F	CCWC	Romlech 2 Commune, Bakan District, Por Sath Province	I	08/11/22
5	Bou Phorn	F	CCWC	Pring Chum commune, Cheung Prey district, Kampong Cham province	I	07/11/22
5	Kann Srey Oun	2	1 st Deputy Chief	SK, Bonteydei Ti1 Commune, Krong Pursat District, Pursat Province	I	04/11/22
5	Chin Saing	F	CCWC Member	Phnov 2 Commune, Sithor Kandal District, Prey Veng Province	I	08/11/22
6	Phath Srey Sroh	F	Deputy Chief of District Council	DRD Peam Ror District, Prey Veng Province	G	19/11/22
6	Vorn Mony Vimean	M	Chief of District Administration	DRD Peam Ror District, Prey Veng Province	G	19/11/22

6	Nhim Sarin	M	Deputy Chief of Economic and Community Development	DRD Peam Ror District, Prey Veng province	G	19/11/22
6	Hu Hon	F	CCWC	Pring Chrum Commune, Cheung Prey District, Kampong Cham Province	I	19/11/22
6	Trut Sarea	M	Team Leader	Kampong Tralach Representative Self-Help Disabilities Organization (KRSDO)	I	11/11/22
6	Suong Hong	M	Commune Chief	Sethey Commune Samaki Meanchey District, Kampong Chhnang	G	14/11/22
6	Ek Reth	M	CC member / Commune WASH Focal Point	Sethey Commune Samaki Meanchey District, Kampong Chhnang	G	14/11/22
6	Meng Chon	F	Commune Head	Ou Ta Paong commune, Bakan district, Pursat province	G	14/11/22
6	Oun Bunsien	M	Commune Council	Ou Ta Paong commune, Bakan district, Pursat province	G	14/11/22
6	Kong Sopha	F	Chief of Social Affairs Office	PDRD Prey Veng province	I	19/11/22
7	Mout Pheavy	F	Chief of Economics and Community Development Official	DRD Sithor Kandal District, Prey Veng province	I	19/11/22
7	Pen Chim	M	Wat Sethey Village Chief	Sethey Commune, Samaki Meanchey	G	14/11/22

				District, Kampong Chhnang		
7	Dul Doeun	M	Vice-Chief	Sethey Commune, Samaki Meanchey, Kampong Chhnang	G	14/11/22
7	Mel Vuthy	M	Village Chief of Peareach	Sethey Commune, Samaki Meanchey District, Kampong Chhnang Province	I	15/11/22
7	Khiev Mao	F	Village Chief of Sresa	1) Tbaeng Khpos Commune, Samaki Meanchey District, Kampong Chhnang Province	2) I	3) 16/11/22
7	Ouk Sim	M	Village Chief of Angkrong	4) Sethey Commune, Samaki Meanchey District, Kampong Chhnang Province	5) I	6) 17/11/22
7	Ok Uon	M	7) Village Chief of Boeng Leach	8) Sethey Commune, Samaki Meanchey District Kampong Chhnang Province	9) G	10) 18/11/22
7	Vorn Voeun	M	Vice-Chief	11) Sethey Commune, Samaki Meanchey District, Kampong Chhnang Province	12) G	13) 18/11/22
7	Chhim Ann	F	VL Chruoy Prakor Village	14) Baray Commune,	15) I	16) 14/11/22

				Duon Keo District, Takeo Province			
7	Ung Srey Mom	F	Deputy VL, Prahouth village	17) RokaKrav Commune, Duon Keo District, Takeo Province	18) I	19) 16/11/22	
8	Meng Kimly	M	VL, Souchan village	20) RokaKrav Commune, Duon Keo District, Takeo Province	21) 1	22) 17/11/22	
8	Va Saroeun	M	VL, Tado village	23) RokaKrav Commune, Duon Keo District, Takeo Province	24) I	25) 18/11/22	
8	Meach Soutieng	F	Service Provider/ Private Water Operator (PWO)	Tbaeng Khpos Commune, Samaki Meanchey District, 26) Kampong Chhnang Province	I	11/11/22	
8	Long Bunna	F	Water Supplier Representative	27) Roka Khnong Commune, Takeo District, Takeo Province	28) I	29) 15/11/22	
8	Phu Thavy	F	Household Head	30) Chroy Prakhor Village, Takeo Province	31) I	32) 14/11/22	
8	Khom Sithan	F	Household Head	33) Chroy Prakhor Village, Takeo Province	34) I	35) 14/11/22	
8	Meang Sorn	M	Household Head	36) Chroy Prakhor Village, Takeo Province	37) I	38) 14/11/22	
8	Chhare Seng	F	Household Head	39) Chroy Prakhor Village, Takeo Province	40) I	41) 14/11/22	

8	Chan Sok	M	Household Head	42) Chroy Prakhor Village, Takeo Province	43) I	44) 14/11/22
8	Om Khol	F	Household Head	45) Thonmort Tbong, Takeo Province	46) I	47) 15/11/22
9	Sao Mao	F	Household Head	48) Thonmort Tbong, Takeo Province	49) I	50) 15/11/22
9	Prim Cheur	F	Household Head	51) Thonmort Tbong, Takeo Province	52) I	53) 15/11/22
9	Pleang Mao	F	Household Head	54) Thonmort Tbong, Takeo Province	55) I	56) 15/11/22
9	Sean Rothy	F	Household Head	57) Thonmort Tbong, Takeo Province	58) I	59) 15/11/22
9	Chi Chea	M	Household Head	60) Prohout Village, Takeo Province	61) I	62) 16/11/22
9	Mork Sreng	F	Household Head	63) Prohout Village, Takeo Province	64) I	65) 16/11/22
9	Oun Ang	F	Household Head	66) Prohout Village, Takeo Province	67) I	68) 16/11/22
9	Chan Mon	F	Household Head	69) Prohout Village, Takeo Province	70) I	71) 16/11/22
9	In Sok	F	Household Head	72) Prohout Village, Takeo Province	73) I	74) 16/11/22
9	Chea Ny	F	Household Head	75) Souchan, Takeo Province	76) I	77) 17/11/22
1	Hok Srey Pom	F	Household Head	78) Souchan, Takeo Province	79) I	80) 17/11/22
1	Jom Sreyleak	F	Household Head	81) Souchan, Takeo Province	82) I	83) 17/11/22

1	Pen Ean	F	Household Head	84) Souchan, Takeo Province	85) I	86) 17/11/22
1	Sang Mork	F	Household Head	87) Souchan, Takeo Province	88) I	89) 17/11/22
1	Sae Thon	F	Household Head	90) Tado Village, Takeo Province	91) I	92) 18/11/22
1	Ear Ra	F	Household Head	93) Tado Village, Takeo Province	94) I	95) 18/11/22
1	Nop Sab	F	Household Head	96) Tado Village, Takeo Province	97) I	98) 18/11/22
1	Chhon Sopheap	F	Household Head	99) Tado Village, Takeo Province	100) I	101) 18/11/22
1	Dim Channy	F	Household Head	102) Tado Village, Takeo Province	103) I	104) 18/11/22
1	Chuon Chheun	M	Household Head	105) Ou Ta Paong Village, Pursat Province	106) I	107) 14/11/22
1	Khiev Ann	F	Household Head	108) Ou Ta Paong Village, Pursat Province	109) I	110) 14/11/22
1	Sot Soy	F	Household Head	111) Ou Ta Paong Village, Pursat Province	112) I	113) 14/11/22
1	Khun Vuthy	M	Household Head	114) Ou Ta Paong Village, Pursat Province	115) I	116) 14/11/22
1	Nhir Khom	F	Household Head	117) Ou Ta Paong Village, Pursat Province	118) I	119) 14/11/22
1	Sous Touch	F	Household Head	120) Anlong Kray Village, Pursat Province	121) I	122) 15/11/22

1	Son Sinuon	F	Household Head	123) Anlong Kray Village, Pursat Province	124) I	125) 15/11/22
1	Khiev Sok	F	Household Head	126) Anlong Kray Village, Pursat Province	127) I	128) 15/11/22
1	Son Sao	M	Household Head	129) Anlong Kray Village, Pursat Province	130) I	131) 15/11/22
1	Khiev Chan	F	Household Head	132) Anlong Kray Village, Pursat Province	133) I	134) 15/11/22
1	In Tim	F	Household Head	135) Anlong Kray Village, Pursat Province	136) I	137) 15/11/22
1	Chhuon Sreyoun	F	Household Head	138) Anlong Kray Village, Pursat Province	139) I	140) 15/11/22
1	Meun Norm	F	Household Head	141) Bat Kokor Chas, Pursat Province	142) I	143) 16/11/22
1	Dong Vorn	F	Household Head	144) Bat Kokor Chas, Pursat Province	145) I	146) 16/11/22
1	Nhoung Ren	F	Household Head	147) Bat Kokor Chas, Pursat Province	148) I	149) 16//12022
1	Soy Khorn	F	Household Head	150) Bat Kokor Chas, Pursat Province	151) I	152) 16/11/22
1	Phen Meun	F	Household Head	153) Bat Kokor Chas, Pursat Province	154) I	155) 16/11/22
1	Phen Rem	F	Household Head	156) Bat Kokor Chas, Pursat Province	157) I	158) 16/11/22
1	Sorn Ith	F	Household Head	159) Bat Kokor Chas, Pursat Province	160) I	161) 16/11/22

1	Chim Buntheun	M	Household Head	162) Don Ey Village, Pursat Province	163) I	164) 17/11/22
1	Thbab Chinda	F	Household Head	165) Don Ey Village, Pursat Province	166) I	167) 17/11/22
1	Chok Korda	F	Household Head	168) Don Ey Village, Pursat Province	169) I	170) 17/11/22
1	Vorn Sorn	F	Household Head	171) Don Ey Village, Pursat Province	172) I	173) 17/11/22
1	Run Ruon	F	Household Head	174) Don Ey Village, Pursat Province	175) I	176) 17/11/22
1	Khon Ra	F	Household Head	177) Don Ey Village, Pursat Province	178) I	179) 17/11/22
1	Kem Rem	F	Household Head	180) Don Ey Village, Pursat Province	181) I	182) 17/11/22
1	Suon Sorn	F	Household Head	183) Chen Tay Village, Pursat Province	184) I	185) 18/11/22
1	Theung Pheap	M	Household Head	186) Chen Tay Village, Pursat Province	187) I	188) 18/11/22
1	Suon Son	F	Household Head	189) Chen Tay Village, Pursat Province	190) I	191) 18/11/22
1	Tun Run	F	Household Head	192) Chen Tay Village, Pursat Province	193) I	194) 18/11/22
1	Touch March	F	Household Head	195) Chen Tay Village, Pursat Province	196) I	197) 18/11/22
1	Men Khem	F	Household Head	198) Chen Tay Village, Pursat Province	199) I	200) 18/11/22

1	Tem Kosal	M	Household Head	201) Trapeang Beng Village, Kampong Cham Province	202) I	203) 17/11/22
1	Sim Thea	M	Household Head	204) Trapeang Beng Village, Kampong Cham Province	205) I	206) 17/11/22
1	Phin Veasna	F	Household Head	207) Trapeang Beng Village, Kampong Cham Province	208) I	209) 17/11/22
1	Im Oan	F	Household Head	210) Trapeang Beng Village, Kampong Cham Province	211) I	212) 17/11/22
1	Vat Thea	M	Household Head	213) Trapeang Beng Village, Kampong Cham Province	214) I	215) 17/11/22
1	Mao Sim	F	Household Head	216) Vealry Lech Village, Kampong Cham Province	217) I	218) 14/11/22
1	Yuth Kapchab	M	Household Head	219) Vealry Lech Village, Kampong Cham Province	220) I	221) 14/11/22
1	Hang Yat	F	Household Head	222) Vealry Lech Village, Kampong Cham Province	223) I	224) 14/11/22
1	Reth Kimheang	F	Household Head	225) Vealry Lech Village, Kampong Cham Province	226) I	227) 14/11/22
1	Um Aun	M	Household Head	228) Vealry Lech Village, Kampong Cham Province	229) I	230) 14/11/22

1	Kang Sim	F	Household Head	231) Propeng Village, Kampong Cham Province	232) I	233) 15/11/22
1	Prak Chan	F	Household Head	234) Propeng Village, Kampong Cham Province	235) I	236) 15/11/22
1	Tun Hoan	M	Household Head	237) Propeng Village, Kampong Cham Province	238) I	239) 15/11/22
1	Each Charn	F	Household Head	240) Propeng Village, Kampong Cham Province	241) I	242) 15/11/22
1	Seng Thai	F	Household Head	243) Propeng Village, Kampong Cham Province	244) I	245) 15/11/22
1	Ros Saron	M	Household Head	246) Peang Meas Village, Kampong Cham Province	247) 1	248) 16/11/22
1	Panh Gnor	M	Household Head	249) Peang Meas Village, Kampong Cham Province	250) 1	251) 16/11/22
1	Ros Nab	F	Household Head	252) Peang Meas Village, Kampong Cham Province	253) 1	254) 16/11/22
1	Pann Dim	M	Household Head	255) Peang Meas Village, Kampong Cham Province	256) 1	257) 16/11/22
1	Men Mon	F	Household Head	258) Peang Meas Village, Kampong Cham Province	259) 1	260) 16/11/22

1	Khim Sea	M	Household Head	261) Svay Teab Village, Kampong Cham Province	262) 	263) 15/11/22
1	Sngoun Mab	M	Household Head	264) Svay Teab Village, Kampong Cham Province	265) 	266) 15/11/22
1	Yi Sareth	M	Household Head	267) Svay Teab Village, Kampong Cham Province	268) 	269) 15/11/22
1	Heang Bunlong	M	Household Head	270) Svay Teab Village, Kampong Cham Province	271) 	272) 15/11/22
1	Nou Kheng	F	Household Head	273) Svay Teab Village, Kampong Cham Province	274) 	275) 15/11/22
1	Din Pho	F	Household Head	276) Peareach Village, Kampong Chhnang	277) 	278) 15/11/22
1	Van Yet	F	Household Head	279) Peareach Village, Kampong Chhnang	280) 	281) 15/11/22
1	Kroch Torn	M	Household Head	282) Peareach Village, Kampong Chhnang	283) 	284) 15/11/22
1	Huot Chan	F	Household Head	285) Peareach Village, Kampong Chhnang	286) 	287) 15/11/22
1	May Leap	F	Household Head	288) Peareach Village, Kampong Chhnang	289) 	290) 15/11/22

1	Long Tok	M	Household Head	291) Peareach Village, Kampong Chhnang	292)	293) 15/11/22
1	Sar Huon	F	Household Head	294) Peareach Village, Kampong Chhnang	295)	296) 15/11/22
1	Ma Pong	M	Household Head	297) Wat Sethey Village, Kampong Chhnang Province	298)	299) 14/11/22
1	Keo Kim	F	Household Head	300) Wat Sethey Village, Kampong Chhnang Province	301)	302) 14/11/22
1	Koch Chey	F	Household Head	303) Wat Sethey Village, Kampong Chhnang Province	304)	305) 14/11/22
1	Nonh Horn	F	Household Head	306) Wat Sethey Village, Kampong Chhnang Province	307)	308) 14/11/22
1	Miech Phoeun	F	Household Head	309) Wat Sethey Village, Kampong Chhnang Province	310)	311) 14/11/22
1	Man Ry	F	Household Head	312) Sresa Village, Kampong Chhnang Province	313)	314) 16/11/22
1	Chim Yat	F	Household Head	315) Sresa Village, Kampong	316)	317) 16/11/22

				Chhnang Province		
1	Thuch Yonn	F	Household Head	318) Sresa Village, Kampong Chhnang Province	319)	320) 16/11/22
1	Thuch Yoeun		Household Head	321) Sresa Village, Kampong Chhnang Province	322)	323) 16/11/22
1	Ly Phoas	F	Household Head	324) Sresa Village, Kampong Chhnang Province	325)	326) 16/11/22
1	Matt Osman	F	Household Head	327) Sresa Village, Kampong Chhnang Province	328)	329) 16/11/22
1	Soen Eun	M	Household Head	330) Angkrong Village, Kampong Chhnang Province	331)	332) 17/11/22
1	Lim Sok Lay	M	Household Head	333) Angkrong Village, Kampong Chhnang Province	334)	335) 17/11/22
1	Khek Phally	F	Household Head	336) Angkrong Village, Kampong Chhnang Province	337)	338) 17/11/22
1	Pho Sruoch	M	Household Head	339) Angkrong Village, Kampong Chhnang Province	340)	341) 17/11/22

1	Khek Morn	F	Household Head	342) Angkrong Village, Kampong Chhnang Province	343)	344) 17/11/22
1	Keo Piseth	M	Household Head	345) Angkrong Village, Kampong Chhnang Province	346)	347) 17/11/22
1	Mao Srey Mom	F	Household Head	348) Boeng Leach Village, Kampong Chhnang Province	349)	350) 18/11/22
1	Nim Yorn	F	Household Head	351) Boeng Leach Village, Kampong Chhnang Province	352)	353) 18/11/22
1	Tuong Roath	F	Household Head	354) Boeng Leach Village, Kampong Chhnang Province	355)	356) 18/11/22
1	Uch Tun	F	Household Head	357) Boeng Leach Village, Kampong Chhnang Province	358)	359) 18/11/22
1	Uch Natt	F	Household Head	360) Boeng Leach Village, Kampong Chhnang Province	361)	362) 18/11/22
1	Bou Sokha	F	Household Head	363) Thnok Keng Village, Prey Veng Province	364)	365) 14/11/22
1	Sam Saroeun	F	Household Head	366) Thnok Keng Village,	367)	368) 14/11/22

				Prey Veng Province		
1	Khan San	M	Household Head	369) Thnok Keng Village, Prey Veng Province	370) I	371) 14/11/22
1	Prak Ly	F	Household Head	372) Thnok Keng Village, Prey Veng Province	373) I	374) 14/11/22
1	Kong San	F	Household Head	375) Thnok Keng Village, Prey Veng Province	376) I	377) 14/11/22
2	Min Tith	M	Household Head	378) Thnok Keng Village, Prey Keng province	379) I	380) 14/11/22
2	Ek Neang	F	Household Head	381) Kravan Village, Prey Veng Province	382) I	383) 16/11/22
2	Tong Sony	F	Household Head	384) Kravan Village, Prey Veng Province	385) I	386) 16/11/22
2	Chhoin Yeun	M	Household Head	387) Kravan Village, Prey Veng Province	388) I	389) 16/11/22
2	Yam Phary	F	Household Head	390) Kravan Village, Prey Veng Province	391) I	392) 16/11/22
2	Phork Seng	F	Household Head	393) Kravan Village, Prey Veng Province	394) I	395) 16/11/22
2	Som Rem	F	Household Head	396) Kravan Village, Prey Veng Province	397) I	398) 16/11/22
2	Tem Reum	F	Household Head	399) Pongro Village, Prey Veng Province	400) I	401) 17/11/22

2	Oun Chakrya	F	Household Head	402) Pongro Village, Prey Veng Province	403) I	404) 17/11/22
2	Tim Sarith	M	Household Head	405) Pongro Village, Prey Veng Province	406) I	407) 17/11/22
2	Tith Sami	F	Household Head	408) Pongro Village, Prey Veng Province	409) I	410) 17/11/22
2	Wou La	F	Household Head	411) Pongro Village, Prey Veng Province	412) I	413) 17/11/22
2	Nhean Sopha	F	Household Head	414) Pongro Village, Prey Veng Province	415) I	416) 17/11/22
2	Voen Savy	F	Household Head	417) Pongro Village, Prey Veng Province	418) I	419) 17/11/22
2	Nut Ken	F	Household Head	420) Prey Damray Village, Prey Veng Province	421) I	422) 18/11/22
2	Sen Sokha	F	Household Head	423) Prey Damray Village, Prey Veng Province	424) I	425) 18/11/22
2	Sek Sok	M	Household Head	426) Prey Damray Village, Prey Veng Province	427) I	428) 18/11/22
2	Him Saveun	M	Household Head	429) Prey Damray Village, Prey Veng Province	430) I	431) 18/11/22
2	Roth Yoeun	F	Household Head	432) Prey Damray Village, Prey Veng Province	433) I	434) 18/11/22
2	Pen Vary	M	Household Head	435) Tean Phleung	436) I	437) 15/11/22

				Village, Prey Veng Province		
2	Prum Som	F	Household Head	438) Tean Phleung Village, Prey Veng Province	439) I	440) 15/11/22
2	Touch Thol	M	Household Head	441) Tean Phleung Village, Prey Veng Province	442) I	443) 15/11/22
2	Tenn Sreymom	F	Household Head	444) Tean Phleung Village, Prey Veng Province	445) I	446) 15/11/22
2	Hem Yuth	F	Household Head	447) Tean Phleung Village, Prey Veng Province	448) I	449) 15/11/22
2	Koy Ravi	M	Household Head	450) Phum Ti Buon Village Tboung Khmum Province	451) I	452) 16/11/22
2	Ban Srors	F	Household Head	453) Phum Ti Buon Village Tboung Khmum Province	454) I	455) 16/11/22
2	Chhum Va	M	Household Head	456) Phum Ti Buon Village Tboung Khmum Province	457) I	458) 16/11/22
2	Kheang Sokry	F	Household Head	459) Phum Ti Buon Village Tboung Khmum Province	460) I	461) 16/11/22
2	Bin Mi	M	Household Head	462) Phum Ti Muoy Village Tboung	463) I	464) 17/11/22

				Khnum Province		
2	Tho Channa	F	Household Head	465) Phum Ti Muoy Village Tboung Khnum Province	466) I	467) 17/11/22
2	Sout Yeung	M	Household Head	468) Phum Ti Muoy Village Tboung Khnum Province	469) I	470) 17/11/22
2	Sann Phalla	F	Household Head	471) Phum Ti Muoy Village, Tboung Khnum Province	472) I	473) 17/11/22
2	Krouch Thoeurn	F	Household Head	474) Phum Ti Muoy, Tboung Khnum Province	475) I	476) 17/11/22
2	Mat Sarous	F	Household Head	477) Trea Ti Muoy Village, Tboung Khnum Province	478) I	479) 15/11/22
2	Sles E For Yam	F	Household Head	480) Trea Ti Bei Village, Tboung Khnum Province	481) I	482) 15/11/22
2	Marn Sos	M	Household Head	483) Trea Ti Bei Village, Tboung Khnum Province	484) I	485) 15/11/22
2	Ron Marn	M	Household Head	486) Trea Ti Bei Village, Tboung Khnum Province	487) I	488) 15/11/22
2	Sa Yeb	M	Household Head	489) Trea Ti Bei Village, Tboung	490) I	491) 15/11/22

				Khnum Province		
2	Pourn Toy	M	Household Head	492) Chrab Village, Tboung Khnum province	493) I	494) 18/11/22
2	Tey Orng	F	Household Head	495) Chrab Village, Tboung Khnum province	496) I	497) 18/11/22
2	Chu Tourn Neth	F	Household Head	498) Vihea Sambu Village, Tboung Khnum Province	499) I	500) 18/11/22
2	Se lit	M	Household Head	501) Vihea Sambu Village, Tboung Khnum Province	502) I	503) 18/11/22
2	Slehs Rohimahs	F	Household Head	504) Saoy Pi Village, Tboung Khnum Province	505) I	506) 14/11/22
2	Vong Visal	M	Household Head	507) Saoy Pi Village, Tboung Khnum Province	508) I	509) 14/11/22
2	Mat Sor Prey	F	Household Head	510) Saoy Pi Village, Tboung Khnum Province	511) I	512) 14/11/22
2	Sa Samrous	F	Household Head	513) Saoy Pi Village, Tboung Khnum Province	514) I	515) 14/11/22
2	Nhnun Vansao	F	Household Head	516) Saoy Pi Village, Tboung Khnum Province	517) I	518) 17/11/22

2	Slehs Eisas	F	Household Head	519) Toul Sambath Village, Tboung Khmum Province	520) I	521) 14/11/22
2	Sin Borey	M	Chief of CEDF	522) Kompong Trabaek District, Prey Veng Province	523) I	524) 18/11/22
2	Muoy Phallang	F	Company Owner	525) Tom Nop Commune, Batheay District, Kampong Cham Province	526) I	527) 11/11/22
2	Keo Ory	M	VL Thonmon Tbong	528) Baray Commune, Duon Keo District, Takeo Province	529) I	530) 15/11/22
2	Som Reth	M	Village chief	Ou Ta Paong Commune, Bakan District, Pursat	G	15 Nov 2022
2	So Vanna	F	Village chief assistant	Ou Ta Paong Commune, Bakan District, Pursat	G	15 Nov 2022
2	Heang Kong	F	Village chief deputy	531) Ou Ta Paong Commune, Bakan District, Pursat Province	532) I	533) 16 Nov 2022
2	Ouch Chea	M	Village chief	534) Me Toek Commune, Bakan District, Pursat	535) G	536) 18 Nov 2022
2	Em Eoun	M	Village chief assistant	537) Me Toek Commune, Bakan District, Pursat	538) G	539) 18 Nov 2022
2	Yang Kea	F	Village chief deputy	Chamreoun Phal Commune, Krong	G	17 Nov 2022

				Pursat District, Pursat		
2	Bou Sochea	F	WOBA focal person	Chamreoun Phal Commune, Krong Pursat District, Pursat Province	G	17 Nov 2022
2	Khuon Sorphea	F	CCWC	540) SK Roleap, Krong Pursat Commune, Krong Pursat District, Pursat Province	541) I	542) 12/11/22
2	Saing Phallieb	F	CCWC	543) Batheay Commune, Batheay District, Kampong Cham Province	544) I	545) 19/11/22
2	Rath Chantha	M	Supplier/Mason	546) Kansoam Ak Commune, Kampong Trobaek District, Prey Veng Province	547) I	548) 18/11/22
2	Pich Ratha	M	Village Chief	549) Kravan Village, Kronhung, Commune, Komchay Mear District, Prey Veng Province	550) G	551) 16/11/22
2	Som Noul	F	Focal Person	552) Kravan Village, Kronhung Commune, Komchay Mear District, Prey Veng Province	553) G	554) 16/11/22
2	Aok Kel	M	Village chief	555) Pongro Village, Kranhung Commune, Komchay Mear	556) G	557) 17/11/22

				District, Prey Veng Province		
2	Gnouk Mom	F	Focal person	558) Pongro Village, Kranhung, Commune, Komchay Mear District, Prey Veng Province	559) G	560) 17/11/22
2	Chea Heng	F	Village Chief	561) Prey Domrey Village, Preychhor Commune, Kompong Trobaek District, Prey Veng Province	562) G	563) 18/11/22
2	Porch Nan	F	Focal Person	564) Prey Domrey Village, Preychhor Commune, Kompong Trobaek District, Prey Veng Province	565) G	566) 18/11/22
2	Eang Sophorn	M	Village Chief	567) Tean Pleung Village, Smorng Commune 568) Komchay Mear District 569) Prey Veng	570) G	571) 15/11/22
2	Sok Leng	F	Deputy	572) Tean Pleung Village, Smorng Commune 573) Komchay Mear District 574) Prey Veng	575) G	576) 15/11/22

2	Morn Sokhorn	M	Focal	577) Tean Pleung Village, Smorng Commune 578) Komchay Mear District 579) Prey Veng	580) G	581) 15/11/22
2	Sok Soeung	M	Village chief	582) Thnolkeng Village, Smorng Commune, Komchay Mear District, Prey Veng Province	583) G	584) 14/11/22
2	Srey Soeur	F	Focal person	585) Thnolkeng Village, Smorng, Commune 586) Komchay Mear District, Prey Veng Province	587) G	588) 14/11/22
2	Yorn Kimoeun	F	CCWC	589) Smorng Cheun Commune, Komchay Mear District, Prey Veng Province	590) I	591) 01/12/22
2	Vor Saren	M	Village chief	592) Ou Ta Paong Commune , Bakan District, Pursat	593) G	594) 14//11/22
2	Vong Mom	F	WOBA focal person & Owner of private water supply	595) Ou Ta Paong, Bakan District, Pursat	596) G	597) 14/11/22
2	Soa Channa	F	CCWC's Chair	598) Kho Tontum commune, Kamong Siem	599) I	600) 18/11/22

				district, Kampong Cham province		
2	Ao Yeing	F	CCWC's Chair	601) Trop commune, Batheay district, Kampong Cham	602) I	603) 18/11/22
2	Sou Ngim	F	Owner of private water supply	604) Sdeung 605) Meanchey, Cheung Prey Kompong Cham , Province	606) I	607) 11/22/22
2	Vantha Bunthorn	M	Manager of private water supply	608) Komchay Mear district, Prey Veng Province	609) I	610) 14/11/22
2	Chhoam Sopuong	F	CCWC	611) Prathiet, Oraeng Ov District, Tboung Khmum, Province	612) I	613) 05/11/22
2	Ngoeun Dina	M	Chamkar Leu Water Supply	614) Facilitated field work in Kampong Cham for five days	615) I	616) 1418/11/22