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CAMBODIA INVESTOR LANDSCAPE ASSESSMENT REPORT

Water, Sanitation, and Hygiene Finance (WASH-FIN)



November 2018

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WATER, SANITATION, AND FINANCE (WASH-FIN)

NOVEMBER 2018

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government

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ACRONYMS AND ABBREVIATIONS

A2F	Access to Finance, or “Facilitate Access to Finance for Small PWOs”
ABA	Advanced Bank of Asia / ABA Bank
AFD	Agence Française de Développement
AIF	Asian Investment Facility
AMK	Angkor Mikroheranhvatho Kampuchéa / AMK Microfinance Limited
ANZ	Australia and New Zealand Royal Bank Cambodia
AUD	Australian Dollar
CAD	Canadian Dollar
CAMPUC	Cambodian Public Bank plc
CBC	Credit Bureau Cambodia
CWA	Cambodian Water Supply Association
DFAT	Department of Foreign Affairs (Australia)
DFI	Development Finance Institution
EU	European Union
EUR	Euro
FTB	Foreign Trade Bank
GBP	British Pound
GDP	Gross Domestic Product
GRET	Groupe de Recherches et d'Echanges Technologiques
JICA	Japan International Cooperation Agency
JPY	Japanese Yen
KHR	Cambodian Riel
LAK	Lao Kip
MDI	Microfinance deposit taking institutions
MFI	Microfinance Institution
MIH	Ministry of Industry and Handicraft
NBC	National Bank of Cambodia
NGO	Non-Governmental Organization
NPV	Net Present Value
ODA	Official Development Assistance
p.a.	Per Annum
PPWSA	Phnom Penh Water Supply Authority
PWO	Private Water Operator
PWSA	Public Water Supply Authority
RGC	Royal Government of Cambodia
RWSSH	Rural Water Supply Sanitation and Hygiene
SDG	Sustainable Development Goals
SME	Small and Medium Enterprises
SRWSA	Siem Reap Water Supply Authority
THB	Thai Baht
TVET	Technical and Vocational Education and Training
USAID	United States Agency for International Development
USD	United States Dollar
VND	Vietnamese Dong
WASH	Water, Sanitation and Hygiene
WASH-FIN	Water, Sanitation, and Hygiene Finance

EXECUTIVE SUMMARY

The United States Agency for International Development (USAID) Water, Sanitation, and Hygiene Finance (WASH-FIN) project seeks to close financing gaps to achieve universal access to water and sanitation services through sustainable and creditworthy business models, increased public funding, and expanded market finance for infrastructure investment. A large financing gap exists in the Cambodian water, sanitation, and hygiene (WASH) sector; the private sector has been identified as a key player in bridging this gap.

WASH-FIN assessed the investor landscape to gain insight on the state of financing for private water operators (PWOs) in Cambodia, assist PWOs to tailor their capital financing efforts to the different investor types, and help PWOs prioritize investor types based on their respective requirements. To achieve this, WASH-FIN conducted extensive desk research and reviewed documentation of prior financing for 41 PWOs that expressed interest in WASH-FIN support. WASH-FIN complemented the desk research with consultations across different financial institutions and investor types to gauge the appetite for financing PWOs. Appendix A details the consultations conducted.

Several commercial banks hold potential to increase lending to PWOs. Foreign Trade Bank (FTB), under a partnership with the French Development Agency (*Agence Française de Développement [AFD]*), advanced over 25 loans to PWOs under a structured finance arrangement involving a credit line, a credit enhancement in the form of a confidential risk-sharing mechanism (known only by the risk sharing agency and the financial institution), and a technical assistance package for both FTB and PWOs under a grant from the European Union (EU)¹. Loans accessed from FTB through this partnership were well received by PWOs, indicating that credit enhancements to other financial institutions could unlock additional local private capital for WASH.

Microfinance institutions (MFIs) in Cambodia generally lend to households. Some of these MFIs have grown their WASH portfolio through partnerships with Water.org and others. However, Japanese MFI Idemitsu was the only MFI that had extended large amounts of loans to about nine PWOs, possibly due to the higher incentive to lend in United States dollars (USD) in Cambodia to avoid depreciation of their local currencies to the dollar.

In March 2017, the National Bank of Cambodia and the Royal Government of Cambodia (RGC) issued a cap on interest rate from lending institutions and regulated commercial financing to WASH sector, including financing to PWOs. The main challenge PWOs face in access to commercial bank loans is high collateral requirements of 100–300 percent of the loan value, coupled with interest rates typically around 6–18 percent. As is typical in the small and medium enterprise (SME) finance space, commercial banks and MFIs consulted as part of this study were not extending commercial financing based on the expected future cashflows from business growth plans. PWOs reported that without hard collateral, they were not able to access financing. Banks and MFIs expressed concern over limited collateral availability and poor accounting practices among PWOs, which often lengthened the assessment stages in the application process. Moreover, impact investors, development finance institutions (DFIs), and foundations showed low interest in the sector due to a challenging operating environment characterized by many informal PWOs.

Although there have been several interventions in the market to catalyze access to finance in the WASH sector, there exists significant opportunity to employ further interventions. Banks and MFIs need

¹ EUR 3 M grant has been allocated by the EU under the Asian Investment Facility (AIF) to support technical assistance to FTB, technical assistance to PWOs (from study phase to completion of works), and WASH campaigns and incentive grant for poor households connections.

education about water supply operations and enhancing their risk assessment and monitoring techniques. PWOs and regulatory agencies require investments in capacity building to increase their commercial capital flowing to private water suppliers in Cambodia.

The objectives of this investor landscape assessment are to:

- Provide a reference point within WASH-FIN on the state of financing for PWOs in Cambodia;
- Assist PWOs with information and knowledge of the finance sector to prepare for presenting projects and proposals to banks and other financial institutions by tailoring their capital raise efforts and materials; and
- Enable PWOs to prioritize different investors to improve the likelihood of accessing finance.

This investor landscape assessment report lays out the approach taken for the assessment; findings from different investor consultations; and the challenges and potential interventions in the Cambodia WASH sector, with a focus on expanding access to finance for PWOs. It closes with a set of recommendations for increased financing to the water sector based on the conditions observed in Cambodia, lessons learned from other geographies in the WASH-FIN portfolio, and international best practices.

1.0 INTRODUCTION AND THE WATER, SANITATION, AND HYGIENE (WASH) FINANCING GAP

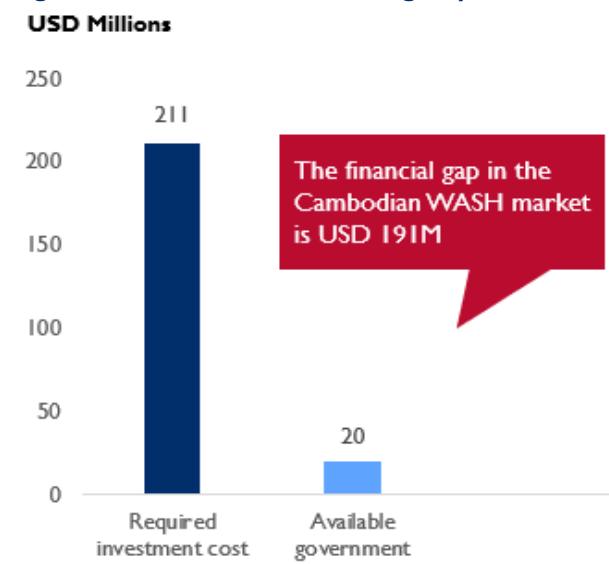
Cambodia is a Southeast Asian country with a population of 15.7 million, of which 79 percent live in rural areas.² With a Gross Domestic Product (GDP) per capita of United States dollars (USD) 1,270 in 2016, the country is classified as a low middle-income economy.³ Financial inclusion is still low in the country with only 15.3 percent of adults holding bank or mobile accounts. Sixty percent of the population is employed informally, with a majority relying on agriculture as their sole source of income (67 percent of the total employment). In addition to agriculture, textiles and tourism are other large sectors with high levels of vulnerable employment.

Access to water supply is low, with only 21 percent of the population having access to piped water supply. Moreover, there is high disparity between urban and rural areas with rural populations recording access levels for piped water supply of only 7 percent compared to urban access at 75 percent.⁴

The government has ambitious targets to achieve universal water, sanitation, and hygiene (WASH) coverage by 2025 as set out in Cambodia's National Strategic Plan for Rural Water Supply, Sanitation and Hygiene (RWSSH) 2014–2025, and Sustainable Development Goals (SDG). Traditional WASH financing sources are insufficient to meet this goal; a mere 20 percent of total WASH financing has been received from official development assistance (ODA) in the past.⁵ This leaves an annual deficit of USD 191 million in the market. Therefore, in order to achieve this goal, the government has prioritized access to piped water financed by alternative sources of investment including private sources.

Presently, public water supply utilities provide piped water services in the capital, Phnom Penh, and other large secondary cities. In Phnom Penh and Siem Reap, public water supply utilities have been transformed into “autonomous authorities” (i.e., Phnom Penh Water Supply Authority [PPWSA] and Siem Reap Water Supply Authority [SRVSA]). As public utilities, these Public Water Supply Authorities

Figure 1.1: Water Sector Financing Gap Per Annum



² Central Intelligence Agency (CIA), The World FactBook – Cambodia (Virginia: CIA, 2018), <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>.

³ The World Bank, Databank: GDP per capita, Global Financial Inclusion (Washington: World Bank, 2017), <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>.

⁴ United States Agency for International Development Cambodia, WASH-FIN Cambodia concept note, (Cambodia: USAID, 2017).

⁵ WASHwatch, Cambodia WASH ODA Donors (London: WASHwatch, 2018), <https://washwatch.org/en/countries/cambodia/summary/statistics/>.

(PWSAs) do not have sufficient capacity to supply water in all parts of urban areas, let alone rural areas; private water operators (PWOs) fill this gap.

The General Directorate of Potable Water Supply under the Ministry of Industry and Handicraft (MIH) regulates and licenses PWOs. There are estimated to be 300–800 PWOs ranging from micro to large enterprises that supply water to approximately 1.5 million Cambodians. Seventy-three percent of PWOs are also estimated to be family owned. In 2012, licensed PWOs established the Cambodian Water Supply Association (CWA) to promote cooperation among water operators, enhance the technical capacity of members, and encourage sustainable expansion of water supply services in Cambodia.⁶

The focus of the United States Agency for International Development (USAID) Water, Sanitation, and Hygiene Finance (WASH-FIN) Cambodia Activity is to support and expand the market for commercial lending to PWOs by:

- Reviewing and developing business plans, strengthening creditworthiness of these operators, and assessing and enticing the local financial institutions on the supply side;
- Developing specific financing proposals, identifying credit enhancements, and providing transaction facilitation and advisory support to the PWOs and financial institutions; and
- Sharing and promoting opportunities for mobilizing local commercial finance into the WASH sector, including capturing lessons learned from previous efforts in country, and sensitizing the local financial institutions about opportunities in the WASH sector.

Private sector financing of PWOs has been limited due to multiple challenges, including the following:

- **Low creditworthiness:** PWOs have limited collateral. This collateral is often tied up in existing loans. As PWOs build a credit history over time by borrowing from the private sector, they can open up opportunities to get better terms, including reduced collateral requirements. Borrowing and making repayments successfully signals to lenders that a borrower consistently meets their debt obligations, thus the lenders are more willing to extend subsequent loans. In addition, a borrower builds a relationship with the lender, which may lead to better terms compared to first time borrowers.
- **Lack of official registration:** As of 2014, more than 50 percent of PWOs operating in Cambodia were unregistered. To curb this, in 2014, the regulator increased the term of licenses from 3 years to 20 years. The increased license term was an incentive for an increased level of formalization and for attracting future investments.⁷
- **Prior focus on public utilities:** In the past, development partners have focused on public utilities, such as projects from the Japan International Cooperation Agency (JICA) providing capacity building for public utility water supply systems. In recent years, PWOs received increased development partner support from, for example, the Department of Foreign Affairs and Trade (DFAT), Agence Française de Développement (AFD), and the World Bank.
- **Informality of PWOs:** The entrepreneurial owners of PWOs struggle to distinguish their personal finances from business finances and maintain financial records of the piped water operations in a format amenable to commercial banks.

⁶ World Bank, Kingdom of Cambodia, *Strengthening Sustainable Water Supply Services through Domestic Private Sector Providers in Cambodia* (Washington: World Bank, 2016), <http://documents.worldbank.org/curated/en/8633146822278129/Strengthening-sustainable-water-supply-services-through-domestic-private-sector-providers-in-Cambodia>.

⁷ Ibid.

The objectives of this investor landscape assessment are to:

- Provide a reference point on the state of financing for PWOs in Cambodia to help shape USAID WASH-FIN activities;
- Assist PWOs to prepare for presenting projects and proposals to banks and other financial institutions by tailoring their capital raise efforts and materials; and
- Enable PWOs to prioritize different investors to improve the likelihood of accessing finance.

This investor landscape assessment report lays out the approach taken for the assessment; compiles findings from different investor consultations; and outlines the challenges and potential interventions that could be considered in the Cambodia WASH sector, with a focus on expanding access to finance for PWOs.

2.0 INVESTOR LANDSCAPE APPROACH

The approach to this Investor Landscape Assessment is three-pronged: financial institution research, PWO analysis, and consultations with stakeholders.

2.1 RESEARCH

The assessment began with desk research on different financial institutions/investor types (including commercial banks, microfinance institutions [MFIs], impact investors, development finance institutions [DFIs] and foundations) in the Cambodian market. Desk research involved identifying prior WASH finance programs such as the AFD and Foreign Trade Bank (FTB) partnership. This provided an initial understanding of the appetite for investment in the sector, how cost of capital and risk can influence bank lending, and a basis for selecting stakeholders to consult.

2.2 PWO ANALYSIS

WASH-FIN conducted interviews with 41 PWOs operating in different regions of the country. These interviews yielded an understanding of current operations, challenges, and sources of past financing, including service expansion/rehabilitation needs. The information gathered during desk research was supplemented with the findings on the lending terms offered to 41 PWOs by banks and MFIs for past and current loans. The Appendix B describes in detail the selection of 41 PWOs for this study.

2.3 INVESTOR CONSULTATIONS

Building on desk research and the analysis of PWOs, WASH-FIN selected 20 investors for consultations. Initial desk research involved identifying a list of investors active in the WASH sector and drawing on a long list of banks in Cambodia. Thereafter, PWO analysis and discussions with the CWA helped to narrow down the list, particularly for banks and MFIs that held the most potential to lend to PWOs. The consultations focused on identifying the banks and MFIs that had demonstrated some interest (e.g., through partnerships) or history in lending to the WASH sector and contacting them to request time to meet in person or schedule a call. The aim of the interviews was to validate information gathered, understand any reservations for extending financing to the sector, and test appetite for lending to the sector currently and in the future.

3.0 INVESTORS

A variety of investors have deployed capital in WASH in Cambodia with objectives ranging from commercial returns to social impact. These investors include commercial banks, MFIs, DFIs, impact investors, and foundations.

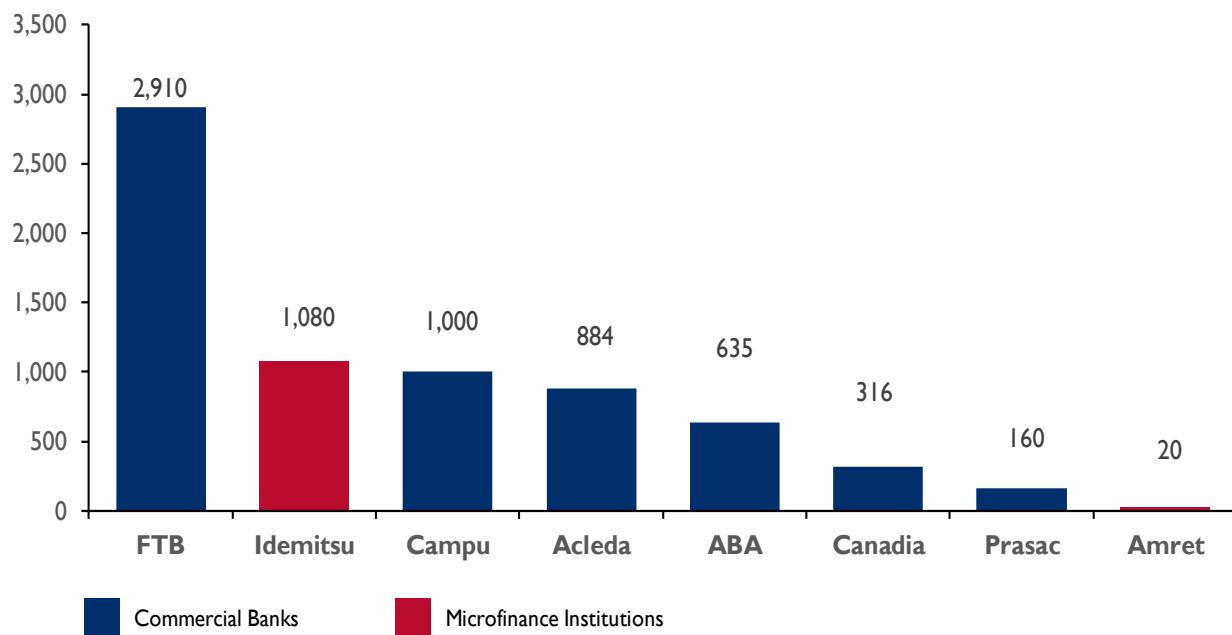
Among these above investors, commercial banks and MFIs hold many similarities key of which include the amount of lending to PWOs and collateral requirements. Before delving into each of the investor types in this section, the similarities of these two investor types are discussed below.

3.1 SIMILARITIES BETWEEN COMMERCIAL BANKS AND MFIS

3.1.1 WASH AS A COMPONENT OF TOTAL LOANS

Among the 41 PWOs interviewed by WASH-FIN Cambodia, 82 percent of their past loan amounts were from banks, with the largest lender being the FTB. AFD partnered with FTB under the Access to Finance (A2F), or “Facilitate Access to Finance for Small PWOs,” program, which offered a USD 15 million credit line and a credit enhancement in the form of a risk sharing mechanism to FTB for financing PWOs. This program includes two parts (technical assistance to both PWOs and FTB independently) to ensure sufficient and sustainable flows of finance to the sector. To date, this partnership has mobilized funding to 27 PWOs. Three MFIs extended 18 percent of the total loans. Among the three, Idemitsu extended the most loans to PWOs—15 percent of the total loans provided.

Figure 3.1: Loans to PWOs in USD 000s

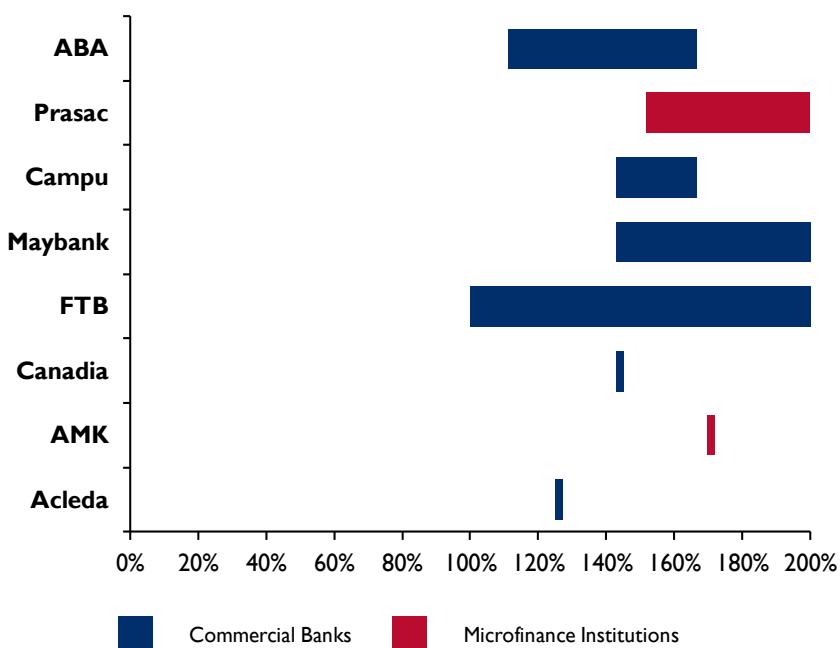


3.1.2 COLLATERAL REQUIREMENTS

Banks in Cambodia use collateral as the main credit risk management strategy, resulting in high collateral requirements of up to 300 percent of the loan value. Typically, banks preferred hard collateral such as

formally registered land and buildings to soft collateral such as informally registered land, and there was limited business plan or cashflow based lending to PWOS. This revealed a need for different risk monitoring and assessment strategies among banks if targets of expanding financing to the WASH sector are to be achieved. Similar to banks, MFI lending practices are characterized by high collateral requirements. PRASAC, Angkor Mikroheranhvatho Kampuchéa (AMK), and some of the major MFIs operating in Cambodia have collateral rates of more than 140 percent of loan value.

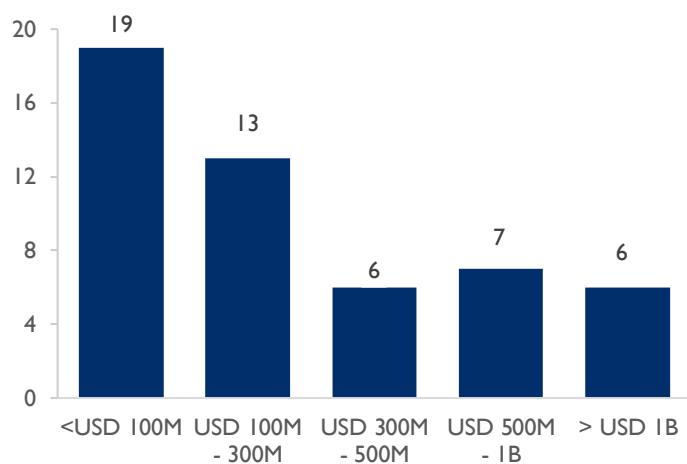
Figure 3.2: Collateral as a Percentage of Loan Value



3.2 COMMERCIAL BANKS

The Cambodian banking sector is robust, with 90 percent of the country's financial assets located in the banking systems. The sector is composed of 54 active banks split into commercial and specialized banks. Commercial banks (39) focus on traditional banking services while specialized banks (15) focus on specific sectors. The main areas of lending are retail trade (18 percent), wholesale trade (12 percent), agriculture (10 percent), and construction (10 percent).⁸

Figure 3.3: Number of Banks Categorized by Asset Size



The banking sector in Cambodia has undergone significant transformation since the early 1990s, when the country was a socialist-oriented economy with minimal presence of private banks. Banks in Cambodia are regulated by the National Bank of Cambodia (NBC).

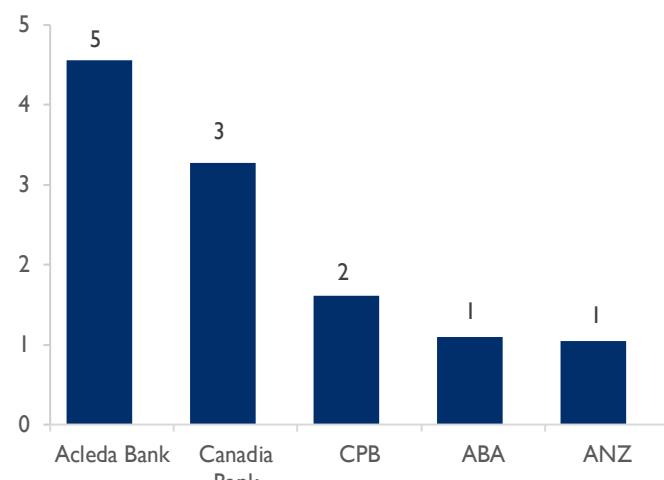
As of 2016, total combined assets reached over USD 12 billion. Six banks each holding assets of approximately USD 1 billion controlled roughly 53 percent of the total. Over 70 percent of the banks had asset sizes of less than USD 500 million each.⁹

⁸ National Bank of Cambodia (NBC), Annual Report (2017), https://www.nbc.org.kh/download_files/publication/annual_rep_eng/AnReport2017ENG.pdf.

⁹ NBC, Report on Comparison of Total Assets (2017), https://www.nbc.org.kh/download_files/data/english/4-totalassets_5690.xlsx.

The banking sector faces several challenges such as limited small and medium enterprise (SME) lending due to required high collateral rates and excessive macroeconomic exposure to foreign economies such as China, where a slowdown or economic shock could negatively affect Cambodia.¹⁰ The banking sector has addressed these challenges through segmentation, such that certain banks specialize in lending to particular sectors and use their knowledge and expertise to offer less stringent lending requirements, improved returns to their shareholders, and a more sustainable use of capital.¹¹ Further, the NBC also increased financial sector resilience through higher liquidity and capital requirements.

Figure 3.4: Largest Banks by Asset Size (USD Billions)



GROSS DOMESTIC PRODUCT (GDP) PER CAPITA AND CREDIT MOBILIZATION TO THE PRIVATE SECTOR. In 2017, Cambodia had a low GDP compared to its neighbors at USD 1,384 GDP per capita, but performed better than some of its wealthier peers when considering the penetration of the banking system into the private sector. This underscores the potential for mobilization of capital to private water operators in the sector.¹²

Figure 3.5: GDP Per Capita (2017) and Credit Mobilization to the Private Sector (2017)

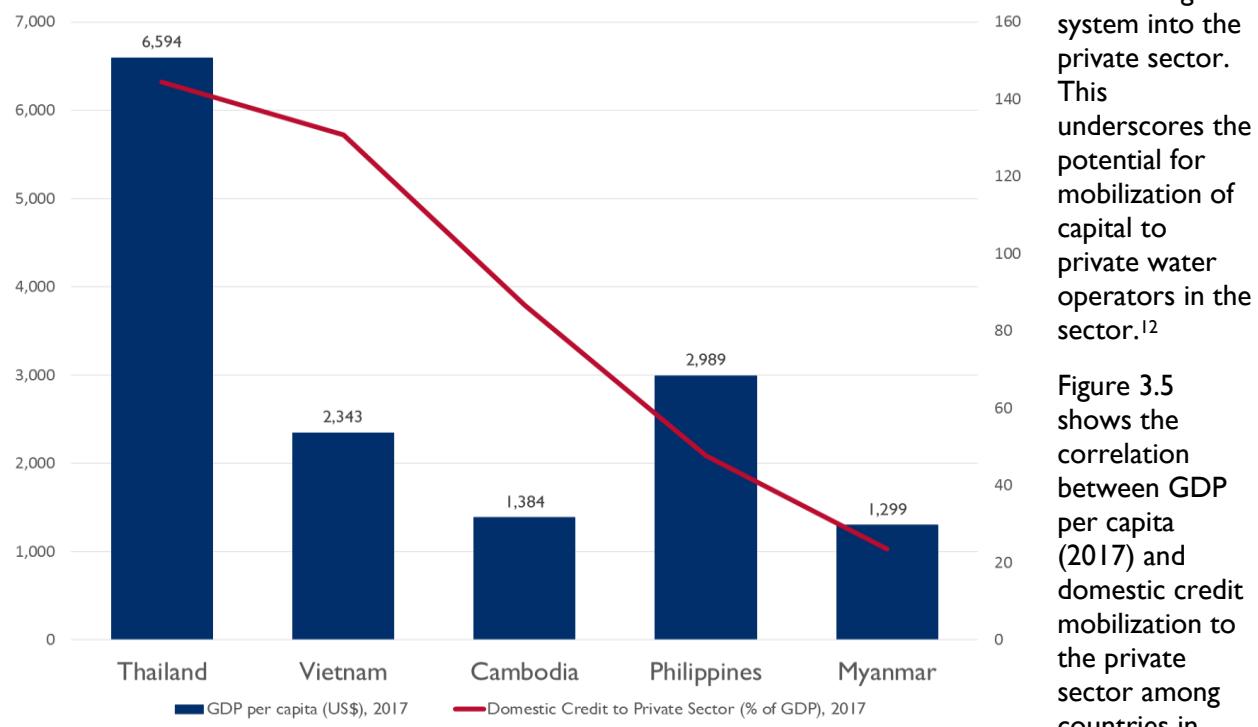


Figure 3.5 shows the correlation between GDP per capita (2017) and domestic credit mobilization to the private sector among countries in

¹⁰ World Bank, *Strengthening Sustainable Water Supply Services through Domestic Private Sector Providers in Cambodia*, pg.31,2016, <http://documents.worldbank.org/curated/en/8633146822278129/pdf/P132172-AAA-Final-Output.pdf>.

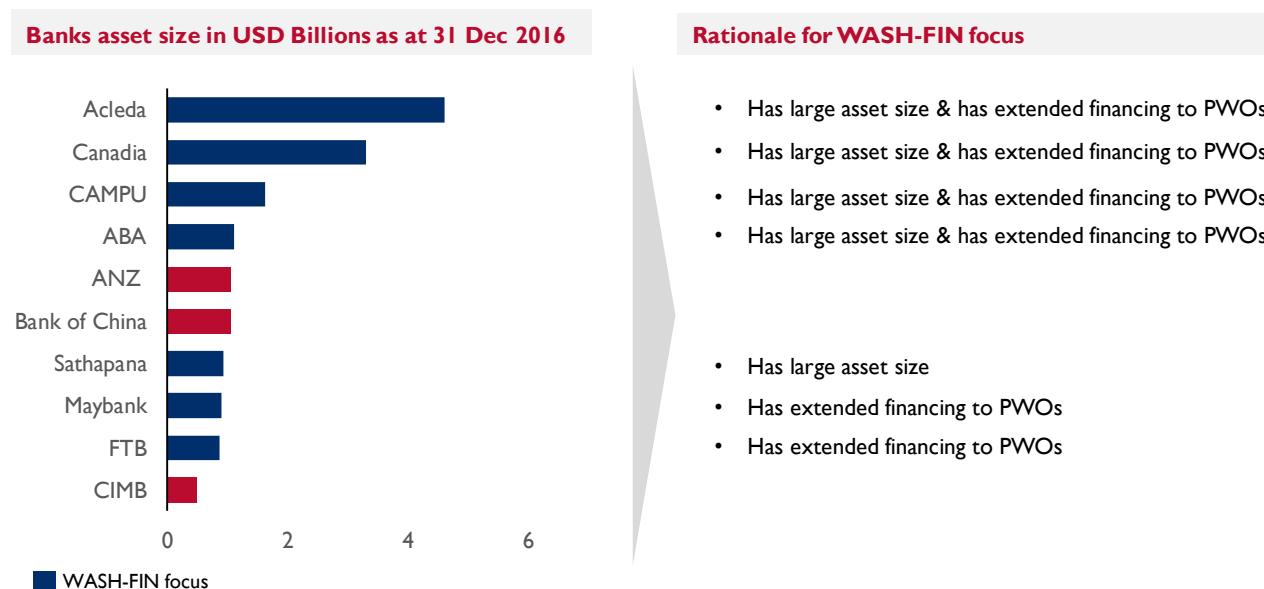
¹¹ Deloitte, *Bank specialization, new strategies, new risks?*, pg. 3, 2013, <https://www2.deloitte.com/br/en/pages/financial-services/articles/bank-specialization.html>.

¹² The World Bank, Databank: Global Financial Inclusion, <http://databank.worldbank.org/data/reports.aspx?source=1228>;

Southeast Asia. Banking penetration is defined as percentage of population with access to formal banking services.

COMMERCIAL BANKS FOR WASH-FIN FOCUS. The banks analyzed in this study were chosen on the basis of asset size and past PWO lending, as seen in Figure 3.6. The rationale for this was that banks that have previously lent to PWOs are likely to continue to lend because they understand the sector, while those with a large asset base are likely to continue to lend widely. As can be noted in Figure 3.6, the Bank of China and Australia and New Zealand Royal Bank Cambodia (ANZ) had large asset sizes but were not selected for this study because they hadn't lent among the 41 PWOs, and had shared no intention of changing their practices. Sathapana was selected even though it has not originated loans to any of the 41 PWOs but has expressed interest in WASH lending.

Figure 3.6: Rationale for Banks Selected for WASH-FIN Focus



COMMERCIAL BANK FINANCING TERM. The commercial terms of loans advanced to PWOs varied with respect to interest rates and tenors (including grace period options). WASH-FIN assessed information gathered from the 41 PWOs on the commercial terms of loans received and compared this with data from consultations with the banks. There was little variance in the interest rates reported by banks compared to those reported by PWOs ranging from 6–14 percent per year. That said, banks often reported shorter loan tenors compared to those reported by PWOs. Tenors ranged from 6 months–15 years, with Cambodian Public Bank plc (CAMPUCI) offering the longest tenors of up to 15 years. Select banks and MFIs are described in detail below.

3.2.1 FOREIGN TRADE BANK (FTB)

Overview of FTB

FTB is one of the largest banks operating in Cambodia since 1979. FTB is a public sector bank with 10 percent of shares owned by the Royal Government of Cambodia (Ministry of Economy and Finance). FTB partnered with AFD to extend loans to PWOs at favorable terms such as lower interest rates and longer tenors. Two packages of technical assistance have been provided under a European Union (EU) grant: (i) to FTB by a consultancy firm called Enclude (contracted by FTB) and (ii) to PWOs by a consortium of Groupe de Recherches et d'Echanges

Technologiques (GRET) and Artelia (contracted by AFD). Currently, loan disbursement under this program takes around six months, with technical and financial preparations taking the most time.

Example projects funded in the past

Under the “Facilitate Access to Finance for Small PWOs” program with AFD, FTB received a USD 15M credit line (non-sovereign concessional loans) to extend loans to PWOs. So far 27 PWOs have received funding.

Lending requirements

Collateral is pledged on land where PWO is based and either 110 percent of property, 200 percent of assets, or 200 percent of Net Present Value (NPV) of 10-year projected cashflows on loan. FTB is looking at other options for financial pledges and has begun to accept future discounted cashflows as a means of determining debt service capacity.

Investment terms

Form of capital	Commercial terms
Instrument: Debt	Typical investment size: USD 25K–1M
Currency: USD, Euro (EUR), and Cambodian riel (KHR)	Interest rates: 6–12 percent p.a. with an upfront processing fee of 2 percent
	Tenor: 4–10 years

3.2.2 ACLEDA BANK

Overview of Acleda

Founded in 1993, the bank has evolved from a non-governmental organization (NGO) for small and micro enterprises to one of the leading banks in Cambodia with 262 branches in provinces across the country as of June 2018. The bank finances PWOs that have been in existence for 2–3 years and have a repayment capacity of 60 percent to 70 percent of their income.

Example projects funded in the past

Acleda bank has loaned more than USD 3M in the WASH sector to fund projects such as building reservoirs, pipe installation, and well development. For PWOs in particular, the bank has extended more than USD 800K in total to 7 PWOs among the 41 PWOs analyzed.

Lending requirements

The bank requires 125 percent collateral. Companies must have a business plan and financial projections. They should also have a debt service coverage ratio of 1.3–1.5.

Investment terms

Form of capital	Commercial terms
Instrument: Debt	Typical investment size: USD 200K–500K
Currency: USD, Thai baht (THB), EUR, Australian dollar (AUD), Vietnamese dong (VND), Canadian dollar (CAD), Lao kip (LAK), Japanese yen (JPY), British pound (GBP), and KHR	Interest rates: 6.5–8.5 percent p.a. as reported by the bank; 10 percent or more from analysis of 41 PWOs Tenor: Up to 6 years

3.2.3 CANADIA BANK

Overview of Canadia Bank

Canadia Bank was established in 1998 and currently has 22 branches in different areas of the country. The bank has a strong presence in the agricultural sector and is keen on venturing into new sectors. When refinancing, the bank considers the borrower’s previous loan performance, focusing on the repayment history and whether the loan was used for the intended purpose.

Example projects funded in the past

Canadia Bank has extended more than USD 500K to 3 PWOs among the 41 analyzed.

Lending requirements

The bank requires borrowers to avail approximately 140 percent collateral. Companies must provide income statements for the previous year and a business plan showing how the loan will be utilized.

Investment terms	
Form of capital	Commercial terms
Instrument: Debt Currency: USD, THB, and KHR	Typical investment size: >USD 200K Interest rates: 10–12 percent p.a. for amounts ranging from USD 50K–500K Tenor: 7 years or more, with a 1-year grace period in some instances

3.2.4 ADVANCED BANK OF ASIA (ABA)

Overview of Advanced Bank of Asia	
Founded in 1996, Advanced Bank of Asia (ABA) bank is a privately owned financial institution that provides services to a wide range of customers, including micro businesses, SMEs, and individuals. By May 2018, the bank had grown to 53 branches nationally and is still expanding. ABA's shareholders are the National Bank of Canada (90 percent stakeholder) and Damir Karassayev (10 percent shareholder).	
Example projects funded in the past	
ABA bank has been active in the water sector, extending more than USD 600K in loans to 3 PWOs among the 41 analyzed.	
Lending requirements	
The bank requires borrowers to avail 160 percent collateral as real estate or 111 percent as savings. Companies must show strong repayment capacity and have a strong management team.	
Investment terms	
Form of capital	Commercial terms
Instrument: Debt Currency: USD and KHR	Typical investment size: >USD 100K Interest rates: 10 percent p.a. Tenor: 6 - 7 years

3.2.5 CAMBODIAN PUBLIC BANK PLC

Overview of Cambodian Public Bank	
Cambodian Public Bank plc is owned by Malaysian Public Bank and has 30 branches in Cambodia. The bank has lent to PWOs in the past but noted that lack of suitable collateral and inadequate financial information from PWOs were the main challenges it faced in availing credit to the companies.	
Example projects funded in the past	
The bank has lent over USD 1M to 4 PWOs among the 41 analyzed.	
Lending requirements	
The bank requires companies to avail collateral covering approximately 140 percent of the loan size and display the capacity to generate income to service loan repayments. These cash flows are not limited to the water business and may be from other businesses (including real estate leases, retail businesses, and other private enterprises). The bank also assesses financial documents including invoices and financial statements and requires the business to have a debt service coverage ratio of 1.5–1.6.	
Investment terms	
Form of capital	Commercial terms
Instrument: Debt Currency: USD and KHR	Typical investment size: USD 500K–1M Interest rates: 8–10 percent p.a. Tenor: Up to 5 years

3.2.6 MAYBANK

Overview of Maybank	
Founded in 1992, Maybank Cambodia is a subsidiary of an international chain that extends its services to other countries, including neighboring country Malaysia. With a specialty of providing services only in USD, the company mostly serves local Cambodian commercial and corporate SMEs located within a 50 km radius of their branches.	

Example projects funded in the past

The bank has availed credit to 2 PWOs offering repayment periods of up to 10 years.

Lending requirements

Maybank extends credit to businesses that have been in existence for more than 3 years and requires the company to avail hard collateral. The bank requires a collateral cover of 200 percent for land or 130 percent of the loan size for land and buildings. Companies must also have a debt service coverage ratio of at least 1.5.

Investment terms

Form of capital	Commercial terms
Instrument: Debt	Typical investment size: >USD 3K with no upper limit; could be as high as USD 3M
Currency: USD only	Interest rates: 8 percent p.a.
	Tenor: Up to 10 years

3.2.7 SATHAPANA BANK

Overview of Sathapana Bank

Established in May 2008, Sathapana was the first Japanese-owned bank operating in Cambodia. Sathapana was originally established in 1995 as an NGO before turning into an MFI. In December 2012, Maruhan Japan Bank plc acquired Sathapana Limited leading to the creation of Sathapana Bank plc.

Example projects funded in the past

Information unknown

Lending requirements

Information unknown

Investment terms

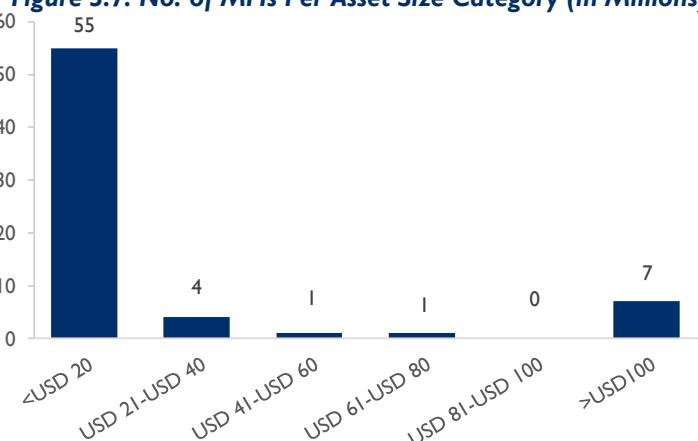
Form of capital	Commercial terms
Instrument: Debt	Typical investment size: > USD 1,500K
Currency: USD and KHR	Interest rates: 9 percent and higher p.a.
	Tenor: >1 year

3.3 MICROFINANCE INSTITUTIONS (MFI)

The Cambodian MFI sector comprises more than 60 MFIs that mostly focus on providing loans to households. These MFIs can be categorized in two different groups: licensed MFIs and microfinance finance deposit taking institutions (MDIs). Non-deposit taking MFIs are the most common, accounting for 62 registered in the country as of 2015. There are just six MDIs, which both lend and take deposits.

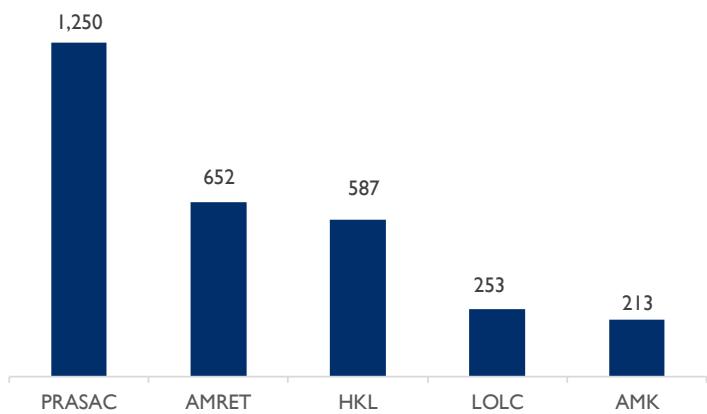
As of 2016, 81 percent of MFIs had less than USD 20 million in assets and only 11 percent had more than USD 100 million in assets, with the largest MFI (PRASAC Microfinance) having more than one billion USD in assets.¹³

Figure 3.7: No. of MFIs Per Asset Size Category (in Millions)



¹³ NBC, MFIs Data (Cambodia: NBC, 2017), https://www.nbc.org.kh/english/economic_research/mfis_reports.php

Figure 3.8: Largest MFIs by Asset Base (in USD Millions)



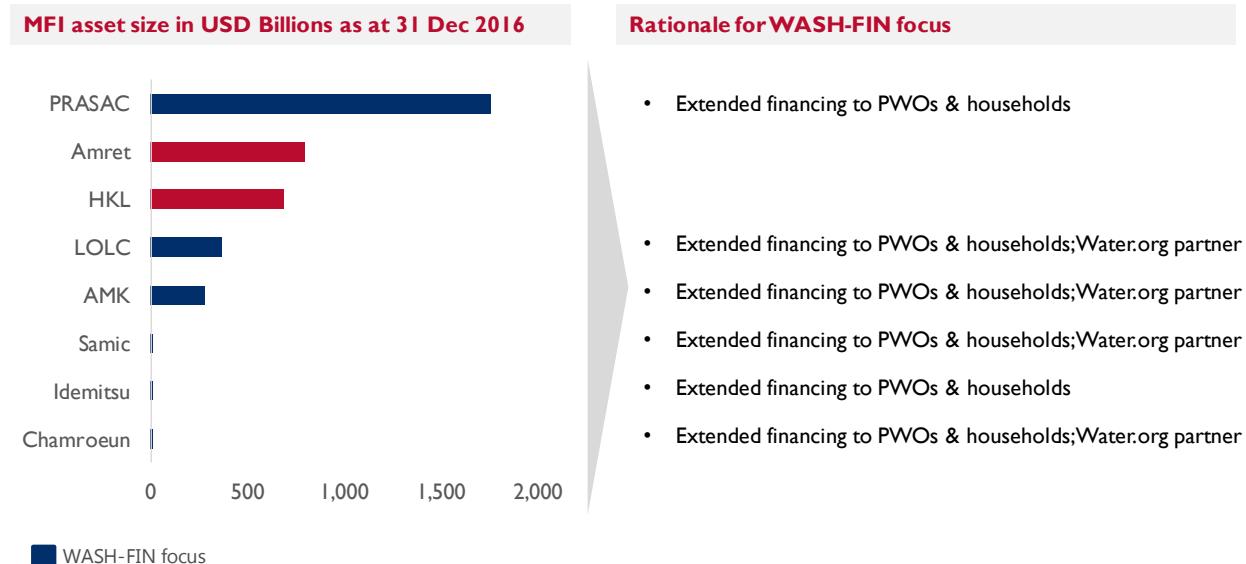
Historically, MFIs have evolved from non-governmental organizations (NGOs) and community projects. They are also diversifying from household financing projects to focus on a wider range of sectors.

The microfinance industry is present in household financing (34 percent of activities), agriculture (26 percent) trade and commerce (10 percent), and other sectors (30 percent). MFIs have had a minimal presence in PWO financing within the WASH sector, with lending directed to households for

sanitation and piped water activities. The main challenge MFIs have faced in Cambodia is the interest rate cap. In March 2017, the national government imposed a ceiling rate of 18 percent to MFIs, which impacted MFIs negatively and forced them to reduce lending in rural areas due to the associated high operating costs linked to the high-risk profile of this customer segment.¹⁴

MFIS OF RELEVANCE FOR WASH-FIN. WASH-FIN selected MFIs with the highest potential to provide loans for WASH based on past WASH lending to both households and PWOs, and MFI partnerships with Water.org as seen in Figure 3.9. Water.org partnered with MFIs to increase WASH lending through designing WASH loan products, technical assistance on understanding the WASH sector, marketing, and exposure to new networks including potential investors.¹⁵

Figure 3.9: WASH-FIN focus



¹⁴ The Cambodia Daily, Central Bank Sets Interest Rate Ceiling, Sparking Fears (Cambodia: The Cambodia Daily, 2017), <https://www.cambodiadaily.com/news/central-bank-sets-interest-rate-ceiling-sparking-fears-126483/>

¹⁵ Water.org, Small loans, big impact: the power of WaterCredit (Kansas: Water.org, 2017), <https://water.org/about-us/our-work/watercredit/>

3.3.1 IDEMITSU SAISON MICROFINANCE

Overview of Idemitsu Saison

Idemitsu is a local MFI present in Cambodia since 2016 helping to stimulate development in all economic sectors. Idemitsu is predominantly owned by a large Japanese business conglomerate and currently has more than 16 branches in the country. Even though it is registered as an MFI, the institution's interest rates, loan tenors, and other terms resembles those of a bank.

Example projects funded in the past

Idemitsu extended more than USD 1M to 9 PWOs among the 41 analyzed.

Lending requirements

The institution requires borrowers to avail collateral, present a business plan and demonstrate that their company(ies) generates enough cashflows. The loans are not fully collateralized and as such cashflows are considered security.

Investment terms

Form of capital	Commercial terms
Instrument: Debt	Typical investment size: USD 10K–800K
Currency: USD	Interest rates: 8 percent p.a. Tenor: 10 years with optional grace period of 1–2 years

3.3.2 PRASAC MICROFINANCE

Overview of Prasac

Founded in 1995, Prasac is a local MDI that lends mostly to individuals in community groups. With more than 172 branches in Cambodia, Prasac has the largest MFI network in the country. The institution only lends to Cambodian citizens.

Example projects funded in the past

Prasac extended loans to 2 PWOs among the 41 analyzed. It also offers latrine loans to individuals that want to improve sanitation.

Lending requirements

The institution requires 152–200 percent collateral, mostly land. Furthermore, the borrower must demonstrate profitability and thus has to be an established business.

Investment terms

Form of capital	Commercial terms
Instrument: Debt	Typical investment size: Up to USD 500K (preference for small loans)
Currency: USD, THB and KHR	Interest rates: 14.4 percent p.a. Tenor: Up to 6 years

3.3.3 LOLC (CAMBODIA) PLC

Overview of LOLC

The MFI LOLC was founded in 1994 by the Catholic Relief Services as a project aimed at enabling access to credit for women. The institution grew to become Cambodia's first regulated MFI in 1999 before receiving its deposit taking license in 2015. It operates in 25 provinces and avails credit to businesses in WASH, commerce, agriculture, and trade sectors.

Example projects funded in the past

LOLC has been actively involved in the WASH sector partnering with Water.org. Thus far, its WASH portfolio includes 10 percent for water connections, 60 percent for toilets and latrines, and 30 percent for water or electricity connections.

Lending requirements

The institution accepts different types of collateral ranging from land titles for large loans to soft titles from commune or district leaders for small loans. The institution is also willing to consider group guarantees.

Investment terms	
Form of capital	Commercial terms
Instrument: Debt	Typical investment size: Up to USD 3K
Currency: USD, THB and KHR	Interest rates: 18 percent p.a. and further upfront and monthly fees
	Tenor: 2–5 years

3.3.4 SAMIC MICROFINANCE LIMITED

Overview of Samic	
Samic was started as an NGO aimed at responding to national public health issues. Formerly known as Cambodia Health Committee Limited, the organization transitioned to an MFI and currently provides small, micro, and WASH loans. In the last year, Samic partnered with Water.org a move which will boost its activities in the WASH sector.	
Example projects funded in the past	
The institution is actively involved in extending loans to households for improvement of water and sanitation hygiene.	
Lending requirements	
The institution requires collateral for loans amounting to more than USD 650, demonstration of strong cashflows, and that borrowers are located within a 35 KM radius of any of its branches.	
Investment terms	
Form of capital	Commercial terms
Instrument: Debt	Typical investment size: USD 50K to 500K
Currency: USD and KHR	Interest rates: 18 percent p.a.
	Tenor: 4 years

3.3.5 AMK MICROFINANCE LIMITED

Overview of AMK	
AMK started as a microcredit intervention in the 1990s by Concern Worldwide before transitioning to an MFI in 2002. The institution has more than 114 offices in the country allowing it access to 89 percent of all villages. AMK has worked with Water.org since July 2017 and received technical assistance through this partnership.	
Example projects funded in the past	
The institution has extended credit worth USD 13M to the WASH sector, 70 percent of which being used for latrine construction and 30 percent being used for the purchase of clean water tanks.	
Lending requirements	
AMK requires 170 percent collateral in the form of land, or undertakes a detailed assessment of the business by looking at invoices and other financial documents of the business for lower collateral.	
Investment terms	
Form of capital	Commercial terms
Instrument: Debt	Typical investment size: USD 50K to 500K
Currency: USD, THB, and KHR	Interest rates: 18 percent p.a.
	Tenor: 4 years

3.3.6 CHAMROEUN MICROFINANCE PLC

Overview of Chamroeun	
Chamroeun was founded in 2006 as an NGO providing loans, saving, and micro-insurance services. Since its inception, the institution has grown its capacity to offer non-financial services such as training courses and counseling services. Chamroeun has 21 branches.	
Example projects funded in the past	
Split for WASH loans is 21 percent water, 19 percent water filters, and 60 percent sanitation.	

Lending requirements

The institution requires documentation such as ID cards, family books, and Credit Bureau Cambodia (CBC) check. Businesses must demonstrate capacity to repay the loan, and the expected income is evaluated vis-à-vis loan size and the business plan.

Investment terms

Form of capital	Commercial terms
Instrument: Debt	Typical investment size: USD 50K–500K
Currency: USD, THB, and KHR	Interest rates: 18 percent p.a.
	Tenor: 4 years

3.4 DEVELOPMENT FINANCE INSTITUTIONS (DFIs)

DFIs participate in the WASH sector mainly through the provision of grants, loans, credit enhancements, and technical assistance. These interventions are available to both public and private sector initiatives and entities. DFIs extend financing directly or through intermediaries.

- Financing directly: In the past, DFIs used instruments such as grants and loans directly to companies. However, direct funding in WASH has solely been to public utilities.
- Financing through intermediaries: For example, AFD provided a USD 15M line of credit to FTB for the bank to provide subsidized loans to water and electricity companies.¹⁶

Figure 3.10 below includes some examples of DFIs and related agencies currently active or considering activity in the WASH sector in Cambodia and their areas of intervention.

Figure 3.10: DFI for WASH-FIN focus

DFI and other Agencies	Support provided
	<ul style="list-style-type: none"> • Fund public and/or private sector initiatives
	
 International Finance Corporation WORLD BANK GROUP	
 Development Credit Authority Putting local wealth to work	
	<ul style="list-style-type: none"> • Fund directly, link enterprises to access financing through MFIs or commercial banks, or provide credit enhancements while offering technical assistance
	
	<ul style="list-style-type: none"> • WASH-FIN focus due to past WASH financing in Cambodia

Historically, DFI interventions mainly focused on urban water providers. However, DFIs recently extended to the rural areas to rural water providers such as the AFD line of credit to FTB to on-lend to PWOs for piped water service delivery.

¹⁶ GRET, Access to funding for water and electricity enterprises in Cambodia (Paris, 2015), <http://www.gret.org/2015/06/%EF%BB%BFacces-au-financement-pour-les-entreprises-de-eau-et-de-electricite-au-cambodge/>

3.4.1 AGENCE FRANÇAISE DE DÉVELOPPEMENT (AFD)

Overview of Agence Française de Développement (AFD)

Present in Cambodia since 1993, AFD is the French government's inclusive public development bank. It commits financing and technical assistance to projects that genuinely improve everyday life, both in developing and emerging countries. It has invested more than EUR 165M in Cambodian WASH sector and is currently working with FTB on increasing the number of loans provided to PWOs.

Example projects funded in the past

AFD provided a USD 15M concessional line of credit to FTB to extend attractive loans to water and electricity companies and a risk-sharing mechanism that offered a credit enhancement on up to 50 percent of the loans for Phase 1, including loans to PWOs supported by World Bank training programs. A second phase of the program is being developed and AFD plans to partner with more banks and support more investments into both water supply and renewable energy investment.

Lending requirements

The supported institutions must comply with international requirements on anti-money laundering and counter-terrorism financing. Moreover, these institutions must improve the robustness of their credit policies procurement of technical assessment and consider both environmental and social management aspects of water supply. In addition to lines of credit, AFD supports these institutions through technical assistance.

Investment terms

Form of capital	Terms
Instrument: Debt	Typical investment size: Based on needs, but typically not less than USD 5 M
Currency: USD	Interest Rate: Concessionary Tenor: According to business needs, and couples with a grace period

3.5 IMPACT INVESTORS

Impact investors aim to invest in companies with the intention of generating a measurable and beneficial social or environmental impact alongside a financial return.¹⁷ Impact investors in Cambodia focus on a variety of sectors including WASH, renewable energy, agriculture, health, and education and utilize a mix of debt, equity, and quasi-equity to deploy investments in the sector. Return expectations vary among impact investors, with those consulted by WASH-FIN targeting market returns or slightly below market returns. They are, however, less risk averse than other investors, are willing to invest in riskier companies, and provide support to develop financial models and business plans. Given the higher appetite for risk, they are thorough in their due diligence processes to ensure they manage their investment risk. Impact investors also primarily invest across multiple geographies and disburse funds in USD to mitigate against currency risk over the long term.

Although the WASH sector presents an opportunity to drive social and environmental impact, there has been minimal impact investment in WASH compared to other sectors. This is especially true for PWOs due to market and operational challenges in the private water supply business. Some of the market challenges mentioned during consultations include minimal regulation in the sector leading to increased losses from water theft and an increasing number of unlicensed water operators. Impact investors have also expressed concern over operational risks that come when PWO infrastructure is destroyed, for example, due to road construction. Investors expressed the most interest in entrepreneurs with strong bookkeeping practices and integrity.

¹⁷ GIIN, *Impact Investing: A guide to this dynamic market*, https://thegiin.org/assets/documents/GIIN_impact_investing_guide.pdf.

3.5.1 UBERIS CAPITAL

Overview of Uberis Capital

Uberis Capital is a venture catalyst firm founded in 2012 that invests in innovative early-stage companies in Southeast Asia, particularly Vietnam, Cambodia, Laos, Myanmar, the Philippines, and Indonesia. Uberis Capital focuses on WASH, clean energy, and agriculture technology, and provides co-investment opportunities for other investors.

Example projects funded in the past

Uberis Capital mobilized ~USD 2.4M in supporting such early-stage entrepreneurs as Wality, a *1001 Fontaines* social venture that has developed over 150 kiosks in Cambodia to supply the rural poor with high-quality fresh drinking water at affordable rates.

Investment requirements

The company uses 13 metrics to evaluate potential investees, including evaluating operations, innovation, ethical considerations, and impact, among others.

Investment terms

Form of capital	Commercial terms
Instrument: Equity (Minority stake)	Typical investment size: USD 100k, but mobilize up to USD 900k in co-investment
Currency: USD only	Target returns: >15 percent p.a. Tenor: >5-7 years

3.5.2 IIX GLOBAL

Overview of IIX Global

Founded in 2009, IIX Global acts as a finance link among investors, entrepreneurs, and innovators in Asia. The company has mobilized over USD 40M in equity investments with a 70 percent success rate in raising capital via their crowdfunding platform. They launched a USD 8M women's livelihoods bond with a guaranteed return for investors. The majority of their investments are in larger markets such as India and the Philippines.

Example projects funded in the past

Although IIX Global funded WASH projects in larger markets such as India, the exact terms such as deal size and water utility type are unknown.

Investment requirements

IIX Global invests primarily in growing business that have demonstrated revenue and a proven market. They require business plans and financial projections, but also offer these as TA to potential investees.

Investment terms

Form of capital	Commercial terms
Instrument: Debt, Equity	Typical investment size: USD 250K–1M
Currency: USD only	Target returns: 5.65 percent p.a. (debt) for a women's livelihoods bond; Equity return varies depending on the deal Tenor: > 4 years

3.6 FOUNDATIONS AND NOT-FOR-PROFIT ORGANIZATIONS

Foundations and not-for-profit organizations have played an active role in increasing access to water for households in Cambodia through provision of grants and non-financial support, and to different stakeholders in the WASH sector. In the recent past, foundations employed grants and non-financial support in a bid to catalyze increased access to water and sanitation in Cambodia. Since 2006, 49 foundations and not-for-profit organizations have mobilized 77 WASH grants worth USD 39 million in Cambodia and only a few have provided loans to fund projects at the national and community levels.¹⁸

¹⁸ WASHfunders, FundingMap, Kingdom of Cambodia (New York: Foundation Center, 2018), <http://washfunders.org/funding-map/>

WASH-FIN knows of at least two currently providing non-financial support and loans directly to enterprises or linking them with MFIs and banks to access finance for WASH. One of these, Water.org, launched the WaterCredit program that partners with microfinance institutions to provide loans to households and businesses in the water sector,¹⁹ and further links social impact investors in the U.S. and Europe with enterprises active in the WASH sector through its WaterEquity program.²⁰ The Stone Family Foundation is also active in the WASH sector in Cambodia, providing grants and loans to WASH enterprises.

3.6.1 WATER.ORG

Overview of Water.org

Water.org is a US-based non-profit organization, founded in 2009, dedicated to empowering people in developing countries to gain access to safe water and sanitation with presence in 13 countries. The organization works with MFIs to provide small repayable loans to households and businesses in the WASH sector and links social impact investors in the U.S. and Europe with enterprises such as MFIs active in the WASH sector.

Example projects funded in the past

Since 2015, Water.org has worked with five MFIs (LOLC, AMK, Samic, Chamroeun, and Vision Fund), disbursing 73,000 loans worth USD 29M to households, impacting over 300,000 people.

Lending requirements

Partner MFIs should have an aligned mission to that of Water.org and express interest in adding WASH loan products to their portfolio.

Investment terms

Form of capital	Commercial terms
Instrument: Debt and grants	Typical investment size: Partner MFIs offer USD 3K–100K
Currency: USD, THB, and KHR	Target returns: Partner MFIs offer 18 percent p.a.
	Tenor: N/A

3.6.2 STONE FAMILY FOUNDATION

Overview of Stone Family Foundation

The Stone Family Foundation was established in 2005 and its international focus is dedicated solely to water and sanitation, with 80% of its annual disbursements going to fund enterprises and enterprise development in Africa and South and South-East Asia. The Foundation also supports mental health and disadvantaged youth projects in the UK. In water and sanitation, the Foundation's vision is financially sustainable WASH enterprises delivering affordable, high quality, and reliable services that have a transformational impact on households in Africa and Asia. The Foundation has been very active in Cambodia for the last 8 years, providing \$11M in funding to scale up successful sanitation marketing programmes with the Ministry of Rural Development and the implementing organisations iDE, WaterShed and SNV which have led to c 400,000 latrines being installed and contributing to Cambodia achieving c 60% coverage in rural sanitation. Since 2016, the Foundation has been increasingly interested in the piped water sector in Cambodia, working in partnership with the World Bank and Gret to provide structure to the market as well as consider different, added value finance and support to enable operators to achieve as close to universal coverage as is possible. This has included detailed analysis of the sector to ensure this additionality and working with and coordinating with existing stakeholders in the sector to ensure alignment. The Foundation is providing a package of support which includes investment capital for network extensions and rehabilitation as well as construction of new treatment plants where possible. In addition, working capital loans are provided to enable household connections alongside a package of technical, financial and marketing / sales support. In parallel, the Foundation has been a long-time supporter of Tuek Sat, 1001 Fontaines' operation in Cambodia and is proving grant support to this rural, non-piped network connected area model until 2021.

Example projects funded in the past

¹⁹ Water.org, Water Credit Toolkits, <https://water.org/about-us/our-work/watercredit/watercredit-toolkits/>

²⁰ WaterEquity website, <https://waterequity.org>

The foundation has provided USD 610K grant to *1001 Fontaines*, a Cambodia-based NGO that installs water plants and trains entrepreneurs on how to operate them.

Lending requirements

Commitment to universal coverage and serving the poor, financial viability, affordability of finance and current levels of investment held by the operator, minimum 50% collateral for investment capital. Willingness and ability to work with key partners.

Investment terms

Form of capital	Commercial terms
Instrument: Debt and grants	Typical investment size: \$150,000 to \$600,000
Currency: USD	Target returns: Average of 7% based on a revenue royalty model
	Tenor: 7 to 14 years

4.0 MARKET CHALLENGES AND POTENTIAL INTERVENTIONS

The WASH sector in Cambodia is characterized by several challenges. In particular, PWOs have limited access to commercial financing, attributed to both the stringent requirements of investors and the lack of PWOs' investor readiness. These challenges include:

- **High collateral requirements:** Banks and MFIs require high collateral of up to 200 percent. Local banks and MFIs rarely lend based on business plans or future cashflows, locking out promising PWOs that meet most of the criteria except possession of hard collateral.
- **Informality of PWOs:** Many PWOs are operating as informal entities with little distinction between the entrepreneur and the business. This has not posed a problem during banks' or MFIs' evaluations of loans since the collateral is typically under the entrepreneur's name. However, entrepreneurs often have poor accounting practices and mix personal expenses with business expenses making it difficult to track margins and overall PWO profitability.
- **Limited regulation of PWOs:** PWO infrastructure is often destroyed during road expansion with no compensation or recourse. In addition, the low enforcement of the law on water theft has led to loss of revenue, significantly impacting PWOs' profitability.

These challenges aside, loans offered with more favorable terms stemming from a lower cost of wholesale capital and credit enhancements such as those under the AFD-FTB partnership proved attractive to PWOs, resulting in lower interest rates, reduced collateral requirements, and longer tenors. The technical assistance offered under the program to both PWOs and the bank was also beneficial. The program required that, in exchange for a lower cost of capital and technical assistance, FTB lower its collateral requirements and cap on the interest rate to make its terms more attractive than its peers. This partnership allowed FTB to extend terms and offer financing to PWOs that may not otherwise have accessed funding.

WASH-FIN also noted that impact investors were less active in WASH compared to other developing markets with a similar investor landscape (such as Kenya and Senegal). In addition to the challenges mentioned above, impact investors expressed concerns over the integrity of some entrepreneurs, and lack of a clear vision to manage the PWO business profitably with a path to scale, increasing water and sewerage access to the community.

Given the challenges cited, WASH-FIN recommends several interventions that could increase commercial financing in the sector, detailed in the following sections.

4.1 CREDIT ENHANCEMENT MECHANISMS

Various credit enhancement mechanisms could be employed to unlock financing for PWOs. A line of credit and guarantee similar to the AFD program (or an extension to the program) could enable commercial banks to extend favorable loans terms to PWOs such as lower collateral requirements and business plan or cashflow-based lending. Another mechanism could be output-based aid where a certain percentage of commercial financing is provided as aid upon achieving agreed on milestones such as a threshold number of new connections, as has been offered in other sectors by bilateral and multilateral agencies (such as the World Bank or KfW).

4.2 FAVORABLE LOAN TERMS

The PWO analysis conducted by WASH-FIN shows that commercial banks and MFIs already actively lend to PWOs. During consultations, banks and MFIs also mentioned that PWO loans typically perform well, at times better than the overall portfolio. As such, banks and MFIs could extend more favorable loan terms such as lower collateral requirements and business plan lending without credit enhancement mechanisms to drive better portfolio performance.

4.3 TECHNICAL ASSISTANCE TO PWOS AND FINANCIAL INSTITUTIONS

Investors reported that PWOs require capacity building to strengthen their business management, finance, and accounting skills, such as bookkeeping and preparation of financial statements. PWOs often lack strong business plans and have limited skills or attention to rigorous financial management. As such, PWOs do not map out future cashflows to assess debt service capacity in line with growth plans. PWOs require assistance to build these skills and also understand the importance of these practices to build and articulate a strong business case to access finance.

Furthermore, PWOs require support for technical design, installation, and implementation. Most PWOs are small, family-run businesses and do not have staff with strong technical or engineering backgrounds. This leaves PWOs vulnerable when investing in infrastructure in two ways; first, technical designs are often inappropriate or inadequate for future expansion and; second, low quality supplies and equipment is often sourced. In addition, MFIs reported that PWOs had weak marketing efforts to increase piped water connections, indicating a need for capacity building to better market their services.

As a result, loans to PWOs are still considered high risk despite the high collateral pledged by the borrowers. PWOs require capacity building and monitoring support, even after the loans are disbursed, to ensure creditworthiness is maintained and ability to service debt remains high over the life of the loan. They also require assistance in building robust technical designs to ensure long-term viability of infrastructure developed and hence de-risk loans.

That said, financial institutions need to be exposed to alternative loan products, credit assessment methodologies, and loan monitoring and risk mitigation strategies if more capital is to be unlocked for WASH. Credit enhancements can further improve the risk profile of loans and shield these institutions from credit risk. Workshops to share experiences among domestic financial institution peers and expose them to other countries' experiences and one-on-one trainings can further enhance prospects for additional lending.

4.4 LONG-TERM TECHNICAL ASSISTANCE TO PWOS

Workshops and trainings help PWOs improve their finance and accounting skills in the short term. However, this was mentioned during consultations to be unsustainable in the long run, since PWOs only use the knowledge gained to obtain a loan and thereafter revert to their old practices. One way to ensure the sustainability of the learning process would be to establish partnerships with local technical and vocational education and training (TVET) institutions (among others) where PWOs could obtain longer-term assistance. This support could be provided through a partnership with CWA or cost-sharing between PWOs and other key stakeholders. Further, the MIH could stipulate that some level of training and a certificate is required for all PWOs as a pre-requisite for licensure.

The value of strong business and financial planning and management could be better communicated to PWOs. CWA has proven instrumental in supporting PWOs. Given its influence and role, working closely with the association to build capacity and communicate the advantages of strong business and financial management to PWOs could help increase investor confidence in the sector.

5.0 CONCLUSION

To meet the ambitious 100 percent coverage targets set out in the government's 2014–2025 National Strategic Plan for RWSSH and SDGs, PWOs require significant investment for expansion and infrastructure. However, PWOs face several challenges in accessing financing. Banks and MFIs require high collateral rates and do not often consider business plan lending (expected future cashflows based on growth plans). This places less emphasis on the PWOs' business management skills and abilities to service debt, and more on available collateral. The AFD-FTB partnership with EU support facilitated investment through lending terms that are more suited to PWOs by relying more on business plan lending and less on collateral. In addition to replicating such partnerships in other financial institutions, interventions employed in other developing countries (such as guarantees and other credit enhancements, financing facilities, and output-based mechanisms) could be employed to facilitate increased WASH investment.

To make PWOs more investment ready, technical assistance is essential to improve business management, finance and accounting skills, technical capacity, and marketing efforts. While business plan development is usually a one-time event, to embed these skills among PWOs and instill discipline to update plans yearly, supporting PWOs post-investment during implementation further de-risks the loans advanced by lenders and monitors progress on objectives laid out in the business plan. Training and partnerships with local institutions could have strong potential to achieve this.

The supply of money from financial institutions to PWOs has steadily increased in recent years, driven partially by increased awareness of and confidence in the ability of the private sector to service its debt and partially by the direct interventions of AFD in offering a combination of technical assistance and lower-cost financing. Nonetheless, additional interventions are required, particularly from government and external development agencies, to encourage more banks to invest necessary funds in the water sector to help to reach universal access in both urban and rural areas.

APPENDIX A: LIST OF CONSULTATIONS

WASH-FIN held 20 consultations with investors to gauge appetite for investment in PWOs. Among the investors consulted, two were identified as low priority because of the following reasons:

- Insitor Impact Asia Fund: acquires significant stake in their investees.
- Oikocredit: does not invest in the WASH sector.

Investor Name	Investor Type	Person(S) Consulted
Foreign Trade Bank (FTB)	Commercial Bank	Deputy General Manager WASH Coordinator
Aceda Bank plc	Commercial Bank	Executive Vice President and Group Chief Operations Officer Senior Vice President and Head of Credit Division
Canadia Bank	Commercial Bank	Chief SME Loan Officer SME Lending Senior Loan Officer
Cambodian Public Bank plc (CAMPU)	Commercial Bank	Head of Credit Operations and Trade Finance Department
Advanced Bank of Asia (ABA Bank)	Commercial Bank	Head of SME and Corporate Loans Head of Commercial Lending
Maybank Cambodia	Commercial Bank	Senior Business Relationship Executive Head Business Banking and Community Financial Services Management Associate
Sathapana Bank	Commercial Bank	Chief Risk Officer Deputy Head of Business Development
Idemitsu Saison Microfinance	Microfinance Institution	Managing Director Branch Manager Business Manager Assistant Manager
PRASAC Microfinance Institution Limited	Microfinance Institution	Senior Credit Officer
LOLC (Cambodia) plc	Microfinance Institution	Chief Executive Officer WASH Coordinator
AMK Microfinance Limited (AMK)	Microfinance Institution	Micro-Insurance and Credit Project Manager WASH officers
Chamroeun Microfinance plc	Microfinance Institution	Chief Executive Officer Chief Operating Officer WASH Financing Coordinator Head of Marketing and Social Performance
Samic Microfinance	Microfinance Institution	Chief Operations Officer Marketing and Projects Manager
Agence Française de Développement (AFD)	Development Finance Institution	Deputy Director Project Officer
Insitor Impact Asia Fund	Impact Investor	Portfolio manager for Khmer Water Supply Holding
Uberis Capital	Impact Investor	Managing Partner
IIX Global	Impact Investor	Manager of Business Development and Partnerships
Oikocredit	Impact Investor	Country Manager
Water. Org	Foundation	Country Representative Cambodia
Stone Family Foundation	Foundation	Director of WASH Head of WASH Programmes

APPENDIX B: PWO ASSESSMENT



This section describes the steps taken undertaken to select the 41 PWOs.

Step 1: Call for PWO Expression of Interest

Together with CWA, WASH-FIN developed a two-page PWO Expression of Interest/WASH-FIN PWO Workshop registration paper in December 2017 and sent it out to all CWA members. In response, WASH-FIN received 86 PWO registration applications for a workshop on January 19, 2018.

Step 2: PWOs' WASH-FIN Project Participation Application

After the workshop and discussion on WASH-FIN Technical Assistance support scope, PWO eligibility criteria, terms, and conditions, all PWOs in the workshop were given another form to fill out and three weeks to decide on a request for WASH-FIN project participation. This second step was completed during the second week of February during which 43 PWOs applied. From the list of 43 PWOs, the WASH-FIN Cambodia Team and CWA staff worked out appointments with respective PWOs and conducted PWO assessment from the week of February 26, 2018.

Step 3: PWO Assessment – Data Collection

From February 26 to the end of April 2018, the WASH-FIN Cambodia Team, with the support of the CWA team, conducted site visits and gathered technical, financial, and investment needs from 41 PWOs that showed interest in participating in the WASH-FIN technical assistance program.²¹

²¹ There were 43 PWOs requesting for WASH-FIN Program Participation. However, 2 were eliminated from the assessment exercise after brief discussions with their owners.

APPENDIX C: LIST OF PWOS ASSESSED

1. Dout Touch Water Supply
2. Bovel Water Supply
3. Ta Kream Water Supply
4. Khor Bunheat Water Supply
5. Orun Water Supply/Hanchey Water Supply
6. Chamkarleu Water Supply
7. Phnom Del Water Supply
8. Preak Romdeng Water Supply
9. Svay Russey Srok Water Supply
10. Kaoh Mitt Water Supply
11. Koh Soutin Water Supply (Chi He)
12. Top Nop Cheang Prey Water Supply
13. Prek Bak Water Supply
14. Prek Raing Water Supply
15. Udongk Water Investment Water Supply
16. Kraing Chek Water Supply
17. Slab Leng Water Supply
18. Say Hong Water Supply
19. Kampong Chamlang Water Supply
20. Roka Kaong Water Supply
21. Bak Chan Water Supply
22. Leng Kheav Preaek Ampel Water Supply
23. Prek Ta Kov Water Supply
24. Prey Pouch Water Supply
25. Kam Samnor Water Supply
26. Svay Romiet Water Supply
27. Roka Kandal Water Supply (Touch Saren)
28. Kroches Construction Development Water Supply (Kantout)
29. Kampong Trabek Water Supply

30. Ba Phnum Water Supply
31. Preah Sdach Water Supply
32. Nak Loeung Water Supply
33. Kamchay Mear Water Supply
34. Ou Kambor Water Supply
35. Chi Kraing Water Supply
36. Angkor Chum City Water Supply
37. Sot Ni Kuom Water Supply
38. Sok Por Water Supply
39. Samrong Yourng Water Supply
40. Cheang Choun Water Supply
41. Krouch Chmar Water Supply

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