

The family business of water supply

Cambodia's small private operators are connecting the countryside

In the green countryside beyond Cambodia's largest cities, small and often family-owned businesses known as Private Water Operators (PWOs) run their own sector. They have sole responsibility for bringing safe water to their communities, and it's a role they take to heart. PWOs continually seek ways to invest in their networks so they can pipe water to more households living without access in remote areas. In this, they share a mission with Water.org.

This is the story of how Water.org found its common cause with these private operators and started to help them overcome their largest challenge: finding lenders who understand their business and its potential. The result has been a surge in enterprise financing for these intrepid businesses. Though they are individually small, together they bring access to safe water to a nation's countryside.



Where is the bottleneck?

In 2018, Water.org began working with PWOs through the Cambodian Water Association (CWA), which represents hundreds of operators. As in other countries where Water.org implements its WaterCredit solution, the goal was to help more households at the base of the economic pyramid access finance through financial institutions to connect to their local water supply.

Partner PWOs reached out to generate demand in their communities, and customers joined rapidly – but only where there were pipes to connect to. This forced Water.org to re-evaluate where the bottleneck really was. The initial studies indicated that PWOs tended to have plenty of water to distribute, yet they could only add customers to their existing physical networks, which were growing too slowly. There was a blockage somewhere, and the answer lay in Cambodia's unique landscape of water supply.

A sector for local heroes

Cambodia's large cities, like the capital Phnom Penh, have big public water utilities built on the classic blueprint. However, these do not have the capacity to reach beyond their urban centers. Starting in the 1990s, the government began licensing private operators to deliver piped water in the rest of the country. With surface-water sources readily available in most areas, this became an unusually active sector for micro, small and medium-sized operators started by local residents.



Today, some 1.5 million Cambodians receive their water through more than 400 licensed PWOs. The great majority are family owned. Each PWO has sole responsibility for a specific area under a 20-year license from the government.

This unusual mosaic of small PWOs, more of an organic than a designed system, has shown its advantages. The operators are invested and interested in their communities, and they are small enough to keep a close eye on their networks. They avoid the most common causes of non-revenue water – which they keep to under 20% on average – and report that 91% of all their household connections are metered.¹

A survey of 104 PWOs in 2022 calculated that since starting up they had invested a combined \$109 million in their infrastructure.¹ In fact, the unique system means that PWO owners themselves, not Cambodian taxpayers or development banks, are making the largest collective investment toward reaching Cambodia's targets for water access.

¹ USAID. Cambodia Private Water Operator (PWO) Business Profile. Water, Sanitation, and Hygiene Finance (WASH-FIN). December 2023.

The main target: to achieve universal access to safe drinking water by 2030, an objective for the whole world under Sustainable Development Goal 6. Unfortunately, fewer than a third of Cambodian households have achieved this.² Closing the formidable gap is an urgent matter in Cambodia, with its acute vulnerabilities to climate-linked disasters, water-borne diseases and related hazards. Transitioning the whole country to safely managed water supply is about bringing the remaining two-thirds of households better health, new economic possibilities, and resilience in the face of climatic and environmental change.

Thirst for finance

When asked about their motivations for starting PWOs, owners speak of the need for water in their communities and their desires to contribute something vital. They see themselves as having a foundational social role, and they are willing to do a lot to fulfil that role, always reaching toward greater coverage in their license areas. But it isn't easy. Average coverage sits at 40% of households in license areas, and slows down as PWOs become established and have to invest more per household to reach increasingly remote corners of communities.¹



They also have to make constant investments to maintain their infrastructure. For instance, road construction crews often dig up their pipes without coordination or compensation, cutting off whole villages. Business challenges multiplied during the COVID-19 pandemic, when bill collection became impossible at times and the government asked PWOs to provide free water to quarantined locations.

At any given time, most PWOs are looking for capital to expand their networks. This, Water.org found, is where it gets really difficult. Personal funds are their major source of capital, often coming from other family businesses. When they need to borrow commercially, owners run into one big obstacle: collateral requirements. An owner may be able to use land as collateral for their first loan, but when the time comes to expand, they are caught short – stuck with high interest rates if they are even able to borrow. PWO finance is, therefore, not just a family business woe but the real bottleneck in achieving universal access to safe water.

"Now we have access to piped water which makes our life easier – cooking, washing, and bathing. I can say life is easier in every way." – Sa, a retired teacher still spending time teaching children in her village

¹ USAID. Cambodia Private Water Operator (PWO) Business Profile. Water, Sanitation, and Hygiene Finance (WASH-FIN). December 2023.

² WHO/UNICEF Joint Monitoring Programme global database, 2022 data.

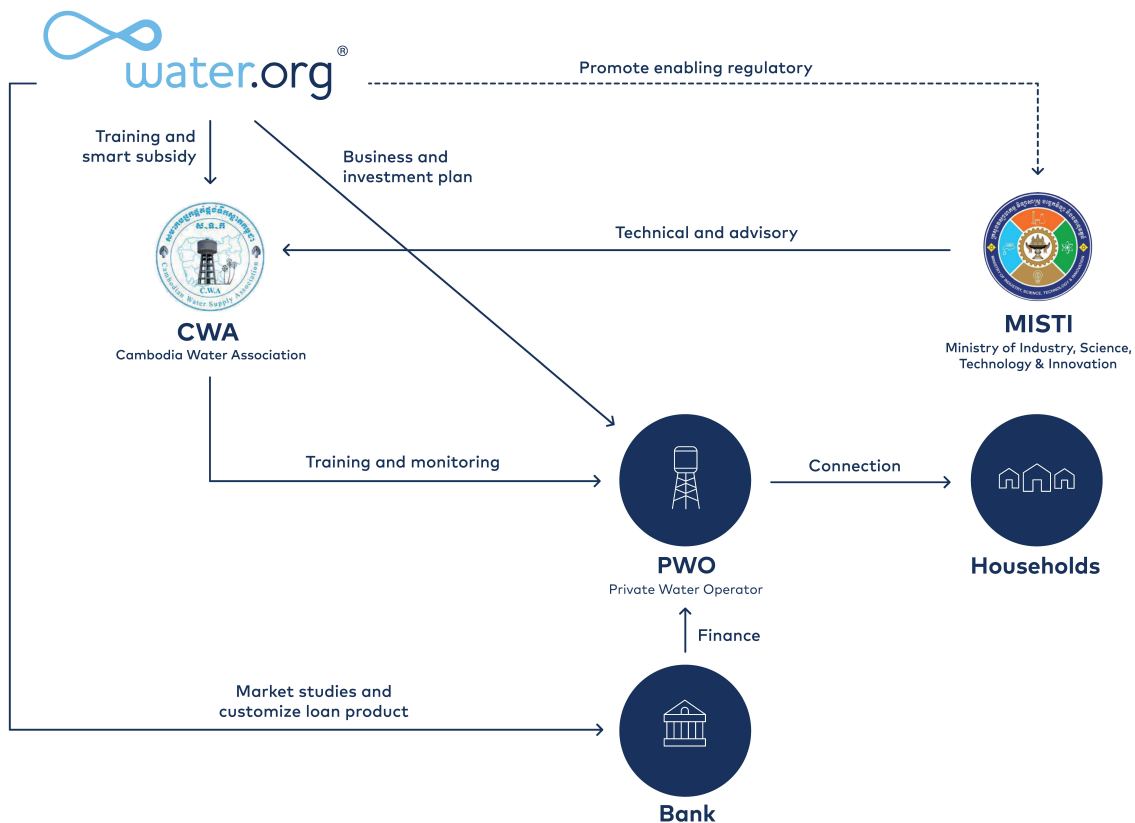
Redefining bankability

Water.org's approach to tackling this bottleneck was to work with all sides: the lenders, the PWOs and their enabling associations. An opportunity to do this on a large scale came with a project across Cambodia, Bangladesh and India in 2020, which coincided with the troubled waters of the pandemic, but nevertheless kicked off big changes.

In Cambodia, together with CWA, Water.org developed a questionnaire to determine PWOs' financing and technical assistance needs. They then set out to meet these. Helping PWOs develop business plans gave the companies the single most sought-after document among lenders looking for evidence of bankability – and one that few family businesses have. A new data management system let CWA consolidate companies' financial and operational information in one place, which became an important source of evidence to present to banks. In some cases, CWA had to make calls to banks during negotiations to advocate for PWOs and smooth over uncertainties.

Starting in 2021, Water.org and CWA worked with lenders to help them see water supply in a new way: as a low-risk business that thrives under the licensing system and remained stable even during the pandemic. Water.org educated lenders on non-collateral-based lending approaches and more appropriate ways of assessing PWOs' credit-worthiness. Bank staff even attended a simulated due diligence visit with a PWO. Water.org also worked with the Cambodian Microfinance Association (CMA), another national apex institution, to help 15 CMA members scale up lending to both households and PWOs. Both CWA and CMA continue to support the development of PWO enterprise finance products by lenders of all sizes.

How private water operators are reaching more of Cambodia's rural households



Kampong Chomlong's breakthrough

Kampong Chomlong Water Supply in Kandal Province was one of the first PWOs to partner with Water.org. Begun in 2003 as a family business, with the owner's son now managing the company, it currently serves more than 10,000 households.

The partnership began in 2019 when Water.org was focusing on demand generation for household connections and microloans to finance them. Kampong Chomlong quickly added more than 2,000 new connections – but while all of these households could afford to hook up, Water.org could see it was Kampong Chomlong itself that faced financial barriers.

Water.org therefore adopted a new focus: changing Kampong Chamlong's relationship with finance. Along with training the company's staff in areas like preparing accounting reports, this included a meeting with SME Bank of Cambodia and CWA to discuss the needs of PWOs. Following the meeting, SME Bank re-assessed the value of Kampong Chamlong's collateral. The company soon received a \$1 million loan at an exceptionally low 5.4% interest rate.

Kampong Chamlong has used the loan to repair damage to pipes from road construction and extend its network to more rural areas. It has reached the coveted goal of 100% coverage in its first license area, as well as 40% coverage in a second license area. It is now seeking further finance to reach all 45 villages across the two areas and to set up a digital control system for its network.



A new investment wave begins

Lenders are actively reaching out to PWOs for the first time. For example, SME Bank now has a specialized team for the water sector. When businesses are not able to produce full financial reports, the team has developed a method for building benchmark statements from basic production capacity and customer numbers. On its own initiative, the bank is lending to 29 PWOs for around \$10 million – market activation that already extends beyond Water.org’s direct involvement.

Another bank, AMK Microfinance Institution, considers PWOs eligible to borrow as long as they have a financial statement, positive cashflow and no more than two existing debts. They offer loans to expand and repair pipe networks, build water treatment plants and install solar power. AMK has issued 92 such loans, mobilizing \$11.5 million in capital.³

Microfinance institutions are crowding in as well. The country’s largest microlender, LOLC, is promoting their PWO loans with leaflets and banners at their branches and at CWA events. They make efforts to negotiate with PWOs on collateral and interest rates.

As the wave builds, banks and lenders have begun looking beyond the tradition of land collateral. They are considering ways to value water infrastructure, moveable assets and future cash flows as alternative collateral forms. And making the best case of all, PWOs are proving that this lender confidence is well placed with an impressive 97% repayment rate.

105

loans disbursed to PWOs
through Water.org facilitation

\$14.8 m

capital mobilized by
Water.org

97%

repayment rate

What happens next?

Engaged in Cambodia for the long term, Water.org will keep supporting these changes in accessible enterprise financing. It is supporting CWA with a focus on helping members reach more households; continuing training and business plan improvement; and working with the government and PWOs to improve standards of water quality, a growing national priority. PWOs will remain a force of entrepreneurship and innovation – reacting and adapting as they look for new ways to grow, new customers and new financing.

³ Data reported by AMK to Water.org’s WaterPortal.



This local spirit is what truly shines in Cambodia. It is a spirit with impacts at the household level, right where Water.org wants to see them. As in other countries, Cambodian households that have gained access to safely managed water report higher quality of life, time savings, reduced health expenditures and increased income.⁴

Bringing all these benefits to the still-unserved half of the country is a tall order, and it will certainly take more than just the private investments of family businesses to achieve. However, the commitment of PWOs has proven to be a powerful force, and they are more than willing to keep investing and reaching out to more of the countryside.

“Before the program we were only able to apply for loans of small amounts with high interest rates, and it wasn’t enough to invest in our pipe network in rural areas. But after the program, we have a loan that enables us to extend our network. Where last year our network was damaged because of road construction, the loan has also let us rebuild and maintain sustainable supply to our customers. These people in rural areas are very happy to get clean and safe water twenty-four hours a day.”

– **Nguon Sivpheng**, General Manager, Kompong Chomlong Water Supply

⁴ Aguaconsult. End of Program Evaluation of Accelerating Access to Safe Water and Sanitation to Communities in Bangladesh, Cambodia, and India. November 2023.

Lessons for future implementation

Along with the success in Cambodia, Water.org has also shown the value of enterprise lending in Indonesia and is making it a focus across all countries of operation in the coming years. The unique family business–driven system of PWOs in rural Cambodia is not directly comparable with situations in other countries, but it is still rich with lessons:

- In every country it is necessary to develop an understanding of the mix of large and small utilities in their distinct roles. Larger utilities may be able to make investments to reach low-income households in large numbers, but they may already have mandates and development support to do so. Small and medium-sized utilities should not be overlooked.
- Rural utilities tend to be smaller everywhere and serve the base of the economic pyramid, as well as being closest to the last mile of missing access. They can become bankable with the right capacity building and financial institutions that understand their operations.
- Banks need alternative instruments and some creativity to reconceptualize collateral, and potentially shift from purely collateral-backed lending to project financing approaches. These can be introduced through direct engagement and lender forums, stoking interest in the sector and a deeper understanding of why utilities are looking for loans.
- Associations of utility operators, which exist in many countries, are a valuable component of the sector that can act as a go-between with governments and a collective voice with lenders.
- Small utilities have different needs in expanding their networks to areas with higher investment requirements per customer, maintaining their sometimes fragile existing networks, and enhancing their resilience to environmental changes – all of which are important parts of working towards universal access to safe water. Few utilities can expand as quickly and sustainably as this goal demands without significant investment.

