ACCESS TO PIPED WATER SERVICES FROM PRIVATE WATER ENTERPRISES IN RURAL VIETNAM

SUMMARY OF RESEARCH REPORT 7

ACCESS TO PIPED WATER SERVICES FROM ENTERPRISES IN RURAL VIETNAM

UTS:ISF INSTITUTE FOR SUSTAINABLE FUTURES

ENTERPRISE IN WASH

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This summary presents key findings from research into small-scale private water enterprises and other types of water service delivery providers in Vietnam, with a focus on the extent to which the poorest members of communities are able to access services.

KEY FINDINGS

1. Poor householders sometimes paid higher connection fees to access piped water services than non-poor households in the selected study areas in rural Vietnam.
2. Connection fees were the main barrier to poor households accessing piped water services.
3. Piecemeal service coverage disadvantaged the poor since poor households sometimes lived far away from the main pipe network.
4. Although water service providers of different types (e.g. enterprises, cooperatives, commune-managed etc.) offered support mechanisms for the poor, these were not consistently made available or evenly communicated or applied.

Private enterprises (PEs) are increasingly providing piped water services in rural Vietnam, supported by policies and incentives from the Government of Vietnam and international donors. While research shows that enterprises are performing a critical role in increasing access to safe water, and that they are operating efficiently, there is limited evidence as to whether the poor are receiving adequate services from PEs and other types of water service providers. This research fills this critical gap, and discusses implications for government policy and the role of civil society organisations (CSOs) and non-government organisations and donors.

This research was conducted by the Institute for Sustainable Futures at the University of Technology Sydney in partnership with the East Meets West Foundation (EMWF); the Centre for Natural Resources, Environmental Studies, Vietnam National University (CRES); and the Institute for Water Resources Economics and Management (IWEM) of the Ministry of Agriculture and Rural Development (MARD).

This summary report provides robust data on who accesses water services provided by private enterprises. It draws on qualitative research in 61 communes and a quantitative study in six locations. The research was conducted in 2015 across eight provinces in Vietnam: An Giang, Ben Tre, Dong Thap, Long An, Tien Giang (all in South/Mekong); and Binh Dinh, Ha Nam and Thai Binh (all in North/Central Vietnam), as shown in Figure 1.

FIGURE 1 SOUTH/MEKONG AND NORTH/CENTRAL RESEARCH AREAS

South/Mekong provinces:
An Giang
Ben Tre
Dong Thap
Long An
Tien Giang

North/central provinces:
Binh Dinh
Ha Nam
Thai Binh

STUDY PURPOSE AND METHODS

The research objectives were:

- To determine **whether or not poor people were being excluded** from piped water services provided by private operators and other provider types.
- To investigate the **perceptions of key stakeholders of piped water services** in Vietnam about the decision-making processes that influenced who receives services.
- To identify **the barriers for poor people** in connecting to piped water services in rural Vietnam.
- To identify **strategies that could support greater access by the poor to piped water** and in doing so, reduce inequalities in piped water provision.

The research was divided into two phases:

PHASE 1: Decisions about services and who was served

The first phase was undertaken across all eight provinces, and comprised 443 semi-structured interviews with householders, interviews with 35 private enterprises, 32 other types of service providers (see Box 1) and 61 government representatives, mostly at the commune level. This phase of the research examined perceptions concerning the decision-making processes involved in defining service areas and who received services, including which actors were most influential.

PHASE 2: Access by poor households

The second phase was undertaken in six communes within three provinces (Tien Giang, Ha Nam and Thai Binh), and comprised GPS mapping of 800 registered poor households across six case study communes. Spatial and statistical analytical techniques were used to identify differences in rates of water service delivery and access between poor and non-poor households across different provider types offering services in those communes.

BOX 1: TYPES OF WATER SERVICE PROVIDERS IN VIETNAM

Community managed: Can take many forms including Water User Associations (WUAs) and may or may not be registered as a formal 'cooperative group'. May also include hamlet-based systems headed by the village chief.

Commune or district managed: Managed by the Commune People's Committee (CPC), the District People's Committee (DPC) or their delegate.

Cooperative: Refers to multi-purpose cooperatives that may also be responsible for electricity distribution, supply of agricultural inputs etc. The system is managed by the cooperative's employees and the cooperative receives revenue from the water charges and it pays the operating expenses from its own accounts.

Private enterprises: Entities that have invested private funds in a water system and own and/or operate the system under a formal or informal agreement with a Provincial People's Committee (PPC), or a Commune People's Committee (CPC). A private enterprise for the purposes of this research is any entity with more than 50% ownership of a water scheme.

pCERWASS: Provincial government agency – 'Provincial Centre for Rural Water Supply and Sanitation Managed Systems'.

State-owned enterprises: Vietnam's Enterprise Law (2014) defines a state-owned enterprise (SOE) as an enterprise 100% owned by the state, however, SOEs can have various forms, such as a 'shareholding' (or joint stock) company or a 'one member limited liability' company. For the purposes of this research an SOE is defined as any company/enterprise where the state/government has a controlling interest.

KEY FINDINGS: DECISIONS ABOUT SERVICES AND WHO WAS SERVED

Management models, locations and their characteristics

Private enterprises (PEs) are one type of organisation providing rural piped water service delivery. They co-exist alongside multiple other types of service providers, grouped as 'other' service providers for the purposes of this research (see Box 1).

Amongst the research sample of 67 service providers in Phase 1 of this study, the PEs and the sizes of the schemes they operated varied significantly. They operated in communes of different sizes, ranging from 1,350 people to more than 12,000 (see Table 1). The 'other' service providers also operated in similar contexts, in communes ranging in size from 2,300 to 14,100 people.

Within these communes, each service provider served particular 'service areas' and within these service areas, connection rates varied significantly. On average, private enterprises had slightly lower rates of connection to their systems (average of 66% of the commune served in South/Mekong and 63% in North/Central provinces) compared with 'other' service providers (average of 83% of the commune served in South/Mekong and 82% in North/Central).

Who makes decisions on who receives services?

Phase 1 explored interviewees' perceptions about who made decisions regarding who was served by rural piped water services, and what factors influenced these decisions. It also investigated actions taken by service providers to reach the poor, and what they believed could be done to increase access to the poor.

Decision-making processes varied across different geographical regions in rural Vietnam as a result of differences in the ways PEs were regulated and monitored, and the relative autonomy of these entities (See Figures 3 and 4 on page 4). In general, PEs exhibited a high degree of influence on decisions about who received their services in both South/Mekong and North/Central regions (particularly in comparison with 'other' service providers). However, the degree of government involvement varied: in South/Mekong region, private enterprises played a significant role in decision-making about service areas and had a high degree of autonomy with regards to where a system was placed, and who it served. PEs needed to keep the CPC informed about critical aspects of their services, but in general, they made decisions themselves and had a high level of autonomy. Government entities were perceived (by PEs, 'other' service providers and commune leaders) to exert very little influence on their decisions.

In the North/Central region, government entities (PPC, CPC and pCERWASS) played a more influential role in managing water service provision. Interestingly, whilst the Women's Union is an influential entity in Vietnam, overall it was not considered a critical body in

TABLE 1 SERVICES PROVIDERS AND THEIR RATES OF CONNECTION, OR SERVICE COVERAGE, WITHIN SERVICE AREAS IN RESEARCH SAMPLE

	SOUTH/MEKONG DELTA REGION		NORTH AND CENTRAL REGIONS	
Service provider (research sample)	**Private enterprises (PEs)** (n = 17)	**'Other' service providers** (n= 13)	**Private enterprises (PEs)** (n= 18)	**'Other' service providers** (n=19)
Provinces covered (number of communes*)	An Giang, Ben Tre, Dong Thap, Long An , and Tien Giang (17)	Dong Thap, Long An, Tien Giang (10)	Ha Nam, Thai Binh, Binh Dinh (26)	Ha Nam, Thai Binh, Binh Dinh (20)
Commune size range (population)	2,000 to 14,500	8,200 to 14,100	1,350 to 12,400	2,300 to 17,500
Service coverage within service areas (reported by service providers)	22-100% served. **Median:** 69% **Average:** 66%	43- 100% served. **Median:** 89% **Average:** 83%	8- 100% served. **Median:** 70% **Average:** 63%	60–100% served. **Median:** 87% **Average:** 82%
Details of service provider types	17 private enterprises	3 community managed 2 cooperatives 2 family business (NGO / government built) 2 pCERWASS 1 state-owned enterprise 3 water user associations.	18 private enterprises	2 community managed (one built with donor contribution) 2 cooperative 6 CPC managed 3 pCERWASS 6 joint stock companies

** Please note that some communes had multiple providers, so some communes in the sample had more than one service provider.*

FIGURE 2 PRIVATE ENTERPRISE SERVICE PROVIDERS

making decisions about who was served by piped water systems. Householders did not exert significant influence over who received services, except in the case of 'other' service providers in South/Mekong, a situation which may relate to the high proportion of community-managed and water-user association managed systems within that sample group. In these organisations, users played a more active role in managing water services. Understanding who made decisions was important for identifying pro-poor mechanisms (and whom to target) to ensure the poor were reached. In general, it is clear that if greater coverage is to be achieved, the government needs to coordinate and manage the ways in which private enterprises plan and develop their services. The differences found across regions in Vietnam also indicated that approaches need to be contextualised for different regions.

FIGURE 3 STAKEHOLDER PERSPECTIVES ON WHO MAKES DECISIONS ABOUT WHO IS SERVED BY PIPED WATER SYSTEMS IN SOUTH/MEKONG REGION. KEY: OUTER = HIGH INFLUENCE AND INNER = LOW INFLUENCE

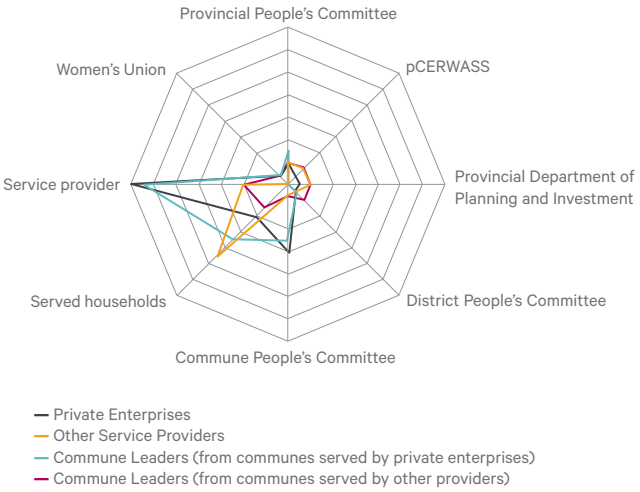
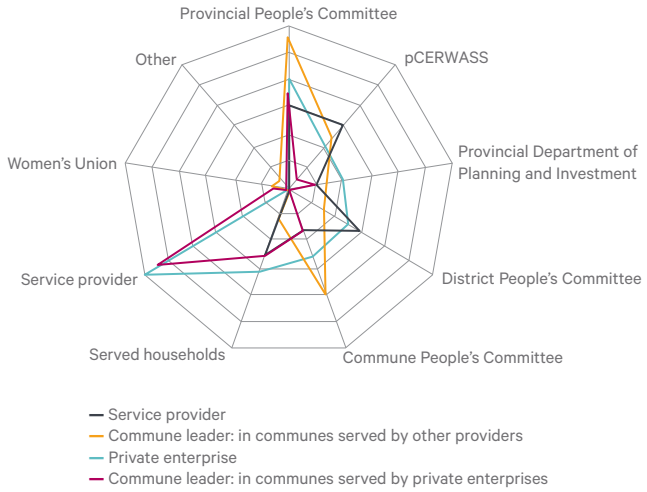


FIGURE 4 STAKEHOLDER PERSPECTIVES ON WHO MAKES DECISIONS ABOUT WHO IS SERVED BY A PIPED WATER SERVICE IN CENTRAL/NORTH REGION. KEY: OUTER = HIGH INFLUENCE AND INNER = LOW INFLUENCE

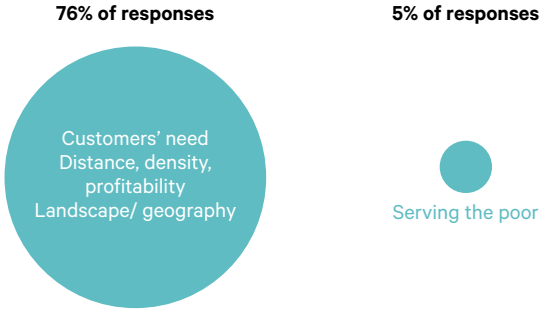


What factors influenced decisions about the location of water infrastructure?

The responses regarding the most important factors for determining who received the service were influenced by the region and the role of the interviewee. In the South/Mekong region, private enterprises considered 'need for water' (demand) to be the most important factor, but commune leaders in areas served by private enterprises did not consider this factor important at all, and cited density as the most important factor. Influences cited by 'other' water providers included density of houses, distance from water sources, geography and the customer's ability to pay, in addition to the customer's 'need for water.' Providing services to poor or low-income customers or ethnic minorities were not considered important by 'other' water providers.

In the Central/North region, customers' 'need for water' (demand) was the most important factor from the perspective of both the private enterprises and the commune leaders in areas served by PEs (unlike in South/Mekong). In areas served by 'other' service providers, commune leaders considered that distance from the water supply and landscape or geographical factors were of higher importance than the customer's need for water, though these factors were considered to be of low importance by the providers themselves.

FIGURE 5 IMPORTANT FACTORS FOR DECIDING LOCATION OF PIPED WATER INFRASTRUCTURE



Overall, a desire to provide access to piped water services to the poor was not the key driver for PEs' decision-making. PEs did not keep consistent records of who was poor (or where they lived) in their service areas, and most PEs did not view providing services to low-income households as an important factor in determining where a system was placed. Additionally, the geographic mapping of poor households in Phase 2 of the research found some evidence that piped water services were less likely to be constructed in areas where poor households were located. While consideration of poor householders didn't drive PEs' decision-making,it often featured in how they ran their businesses, as detailed below.

What influenced variations in fees and tariffs?

Connection fees and tariffs varied across the provider types and their geographical locations. These differences reflected the varied policy contexts, geographical contexts, the age of systems, differences in operational costs (e.g. electricity) and profit margins.

While PEs reported offering case-by-case concessions more often than other types of service providers, overall their median connection fees and tariffs were higher than those charged by other types of service providers. PEs in North/Central region had median connection fees that were higher than the fees charged by other types of service providers (the median was almost double) which had implications for affordability. In South/Mekong region, median tariffs were higher in areas serviced by PEs than in areas serviced by other service providers, with a difference of VND1740 /m^3 (US$0.08) between the two types (Figure 6).

However, in the South/Mekong, PEs had lower median connection fees than other service providers, which could be a result of a higher proportion of free and subsidised connections being offered. These subsidised connections were likely the result of output-based aid programs delivered in the South/Mekong region for PEs by organisations such as the East Meets West Foundation.

The research also found significant variations in connection fees *within* communes, with a range from zero (no connection fee) to approximately VND4 million. This presents a potential issue in terms of equity within communes. Given that connection fees were the most important barrier to poor households connecting to piped water services, exploring ways to better regulate the connection fees charged by different service providers needs to be a policy priority. Efforts in this area are already underway in some provinces. An example is Tien Giang Province, which recently prohibited the charging of connection fees, with costs to be recouped through tariffs. At the time the research was conducted, this policy had not yet been fully implemented.

The two regions showed similar patterns in perceptions of affordability of tariffs (Figure 7). On the whole, households that were connected found the monthly water tariff to be affordable, with less than 10% of householders (in both regions and for all service provider types) reporting the monthly water tariff to be 'very expensive'. Phase 2 of this research found that householders were able to modify their water use in order to keep the monthly water bill down and within their household budgets. For example, poor householders used piped water for very few activities to limit their costs.

FIGURE 6 MEDIAN WATER PRICES REPORTED BY SERVICE PROVIDERS (CONNECTION FEES). EXCHANGE RATE 2,2770 VND TO $1USD AT MARCH 2017.

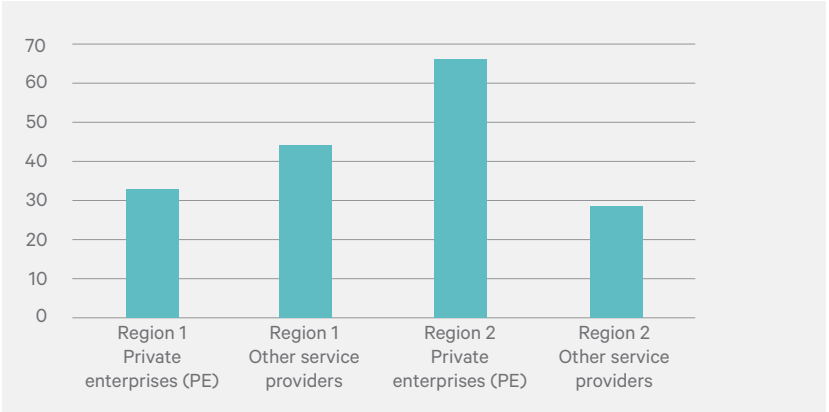
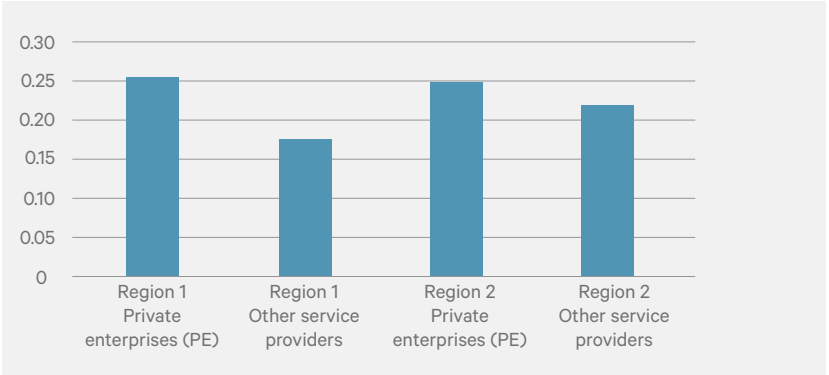


FIGURE 7 MEDIAN WATER PRICES REPORTED BY SERVICE PROVIDERS (TARIFFS). EXCHANGE RATE 2,2770 VND TO $1USD AT MARCH 2017.



> I don't want to connect to the piped water service because we are too poor and don't have a poverty certificate. My mother lets us use her water, and that's good enough for me.
>
> Householder from Song Binh Commune, Tien Giang Province

This research sought to determine whether being in a female-headed household was a barrier to accessing piped water services. Just over 50% of householders interviewed in Phase 1 were female, and 40% were from female-headed households. Interviewees were asked whether female-headed households were treated in the same way as male-headed households. Our analysis of the responses found no evidence that households headed by women were disproportionately represented among those that were not connected to a piped water service. However, it should be noted that although views on gender and gender discrimination were sought, the responses lacked detail, and thus credibility and quality are limited.

Decisions about the provision of discounts and exemptions

As noted above, connecting poor households was not a driver of PEs' decision-making. However, interviews in Phase 1 showed that PEs offered subsidies or exemptions on connection fees and/or monthly tariffs more often than other service providers in both regions. The reported rate of offering subsidies was higher in South/Mekong than in North/Central (Figure 8).

The research revealed several instances where poor households paid more than non-poor households for connection to piped water services, though this was not confined to any particular type of service provider. Poor and near-poor householders served by 'other' providers (community owned and government schemes) in South/Mekong region paid higher median connection fees than non-poor households (Figure 10). Also, poor households in North/Central region served by PEs paid higher median connection fees than non-poor households. This is possibly as a result of being further away from the main network, and/or the interest paid for some repayment schemes implemented in North/Central region (Figure 11) and warrants further inquiry.

FIGURE 8 POOR HOUSEHOLDERS' RESPONSES TO WHETHER OR NOT SUBSIDIES/EXEMPTIONS AND INSTALMENT PAYMENT PLANS WERE MADE AVAILABLE TO THEM

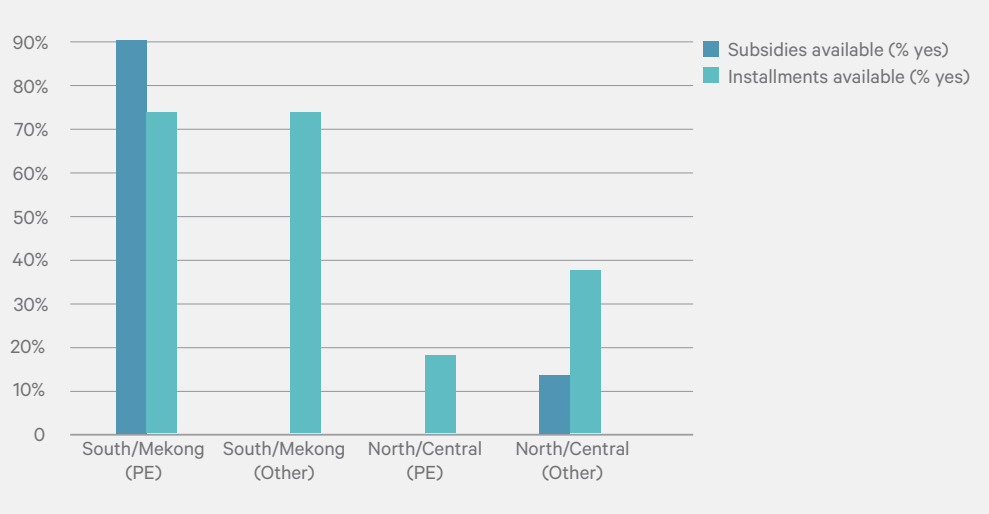


FIGURE 9 DEFINING WATER SERVICE AREA BOUNDARIES IN TIEN GIANG PROVINCE, SOUTH VIETNAM.

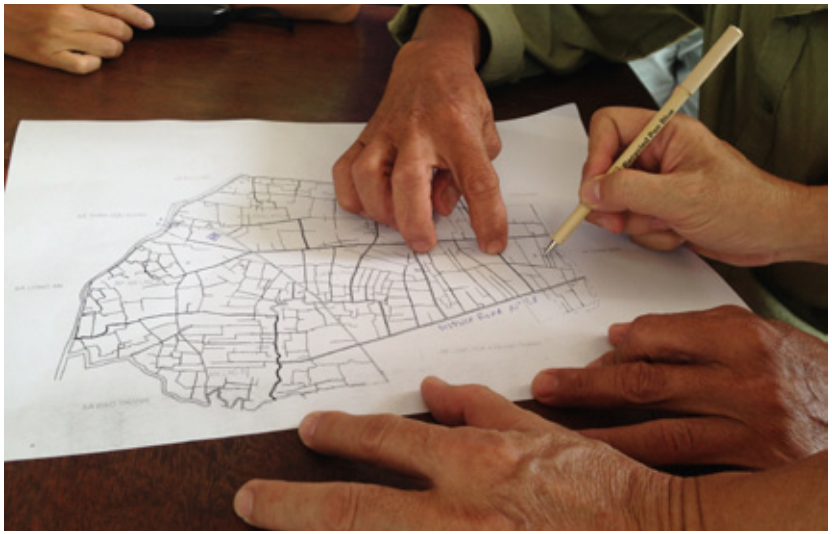


FIGURE 10 SOUTH/MEKONG REGION. CONNECTION FEES PAID BY HOUSEHOLDERS TO CONNECT TO OTHER TYPES OF SCHEMES

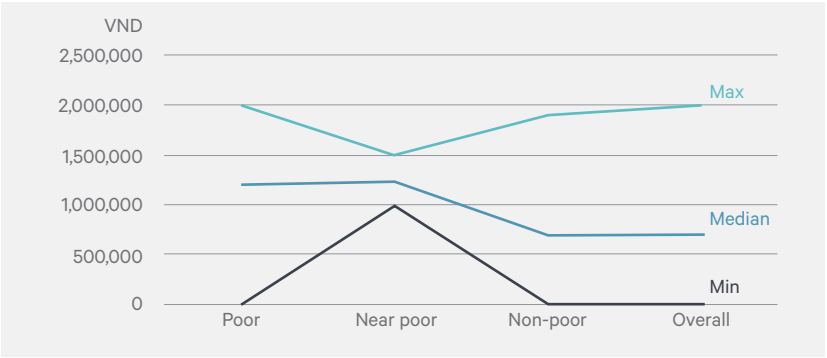
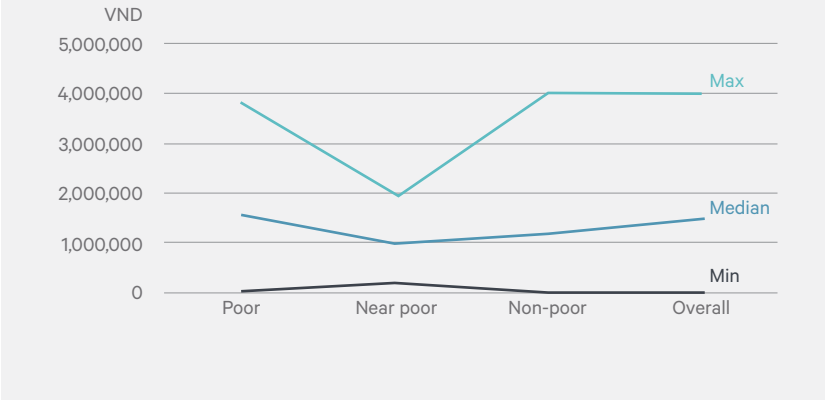


FIGURE 11 NORTH/CENTRAL REGION. MEDIAN CONNECTION FEES PAID BY HOUSEHOLDS TO CONNECT TO PRIVATE ENTERPRISES



KEY FINDINGS: MAPPING ACCESS BY THE POOR TO PIPED WATER SERVICES

The second phase of the research involved quantitative and spatial analysis of the links between water service delivery and poverty status. This was undertaken through case study research in six communes in three provinces selected to represent a broad range of private enterprise engagement in piped water services in Vietnam as advised by our Vietnamese research partners (Table 2). Interviews were also conducted to investigate why some poor households were not connected to the piped water system.

Location of poor households in relation to water service areas

Phase 2 found some evidence that piped water services were less likely to be constructed in areas where poor households were located though this finding was not definitive as it was only possible to examine this question in three of the six case studies due to data limitations.

In four of the six case studies, however, poor households were statistically less likely to be connected within service areas as shown in Table 3. Again, data limitations made it impossible to calculate the likelihood of connection in the remaining two cases.

TABLE 2 CASE STUDY COMMUNES

REGION	PROVINCE	COMMUNES
North region – Red River delta	Ha Nam	Thanh Hai
		Hoa Hau
	Thai Binh	Dong Phu
South region – Mekong River delta	Tien Giang	Luong Hoa Lac
		Tan Phong
		Thien Trung

TABLE 3 RESULTS FROM FOUR CASE STUDIES IN RURAL VIETNAM

LOCATION	FINDING
Thanh Hai (Ha Nam Province)	**Non-poor** households were **more likely to access piped** water. Non-poor households were ~1.54 times more likely to be connected than poor households (across the three water service areas in this commune)
Hoa Hau (Ha Nam Province)	**Non-poor** households were **more likely to have a piped water connection** in both the PE and community-managed areas (with odds ratios ranging from ~6.5 to ~50). See Figure 13 for a visual display of poor household locations and their rates of connection.
Tan Phong (Tien Giang Province)	**Non-poor** households were ~4.12 **more likely that poor households to access piped water in the PE service area.** No significant difference was found between rates of poor and non-poor access in the two other water service areas.
Thien Trung (Tien Giang Province)	In the water service area managed by a state-owned enterprise, non-poor households were ~4.26 times **more likely to access piped water than poor households.** In the other water service area in this commune, managed by a PE, non-poor households were ~2.78 times more likely to access piped water than poor households.

FIGURE 12 WATER SERVICE STAFF AND RESEARCHERS IDENTIFY WATER SERVICE AREA BOUNDARIES

FIGURE 13 POOR HOUSEHOLD CONNECTIONS TO WATER SUPPLY, HOA HAU COMMUNE, HA NAM PROVINCE

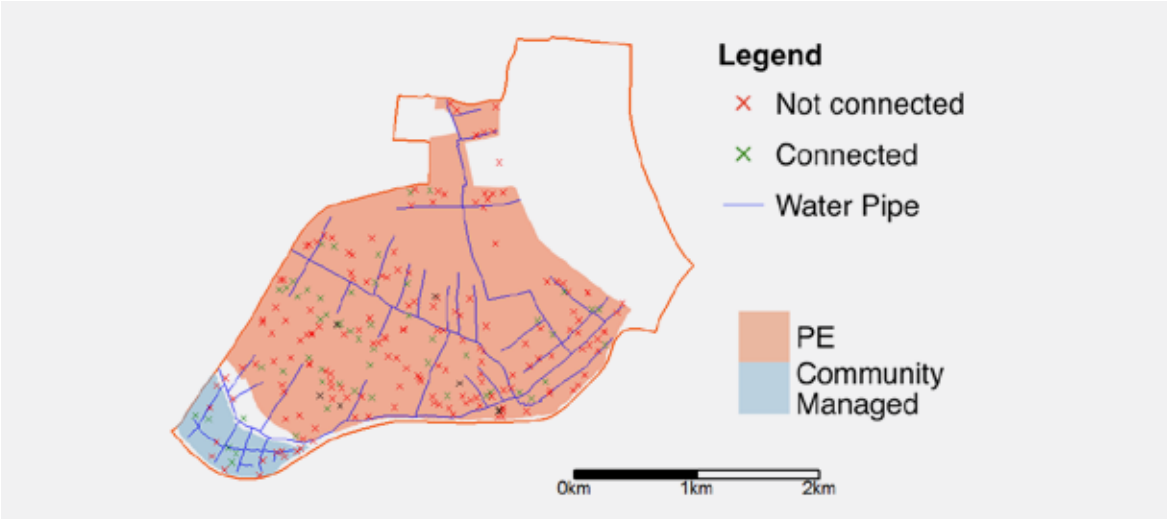
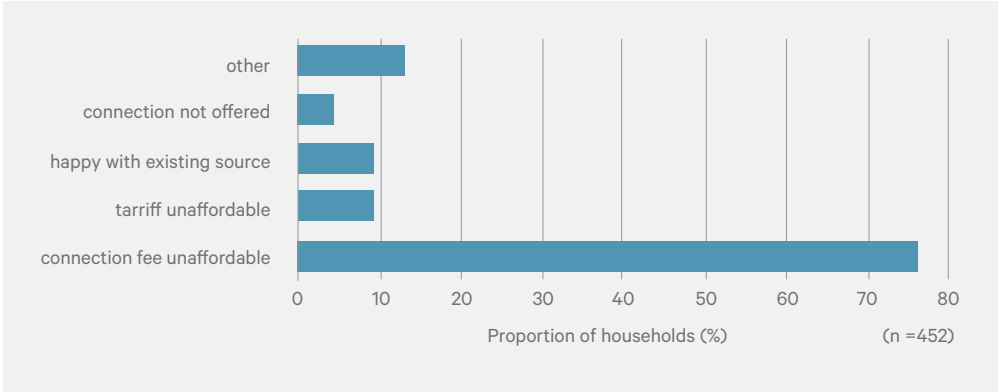


FIGURE 14 REASONS FOR NO PIPED WATER CONNECTION FOR POOR HOUSEHOLDS (ALL REGIONS, N = 452)



Dominant reasons for poor households not to be connected

It was clear that poverty was a barrier to accessing piped water in rural Vietnam, with *'not affordable'* cited by householders as the primary reason for not connecting to a piped water system in areas serviced by PEs (in South/Mekong and Central/North) and by households in areas served by other service providers (in South/Mekong) (Figure 14). This was supported by the majority of service providers in both regions, who also stated that people did not connect to the piped water service because it was unaffordable. However, households in Central/North areas served by other providers cited concerns about water quality as one of the main reasons why they did not want a connection.

Of the householders who were interviewed and responded to questions about affordability and were connected to the piped water service, it was observed that overall, connection fees were not considered to be expensive, or 'a little expensive but manageable'. In no area was 'very expensive' the most common perception about connection fees for those who were connected. It can be assumed that those who were able to connect could afford the connection fee, whereas those who found the connection fee 'very expensive' were probably not connected.

KEY FINDINGS: APPROACHES TO SUPPORT THE POOR

There are a range of mechanisms that have the potential to support better access to services for the poor. Respondents from PEs, other service providers and government identified a range of mechanisms including: government-funded subsidies for the poor (directed to the poor themselves, or to service providers), donor funding, communication and engagement activities to increase consumer demand, augmenting systems so they can reach more people, and pro-poor fee structures.

From the case studies (Phase 2 of the research) a related issue that emerged was a gap in information sharing about available support for poor households. In at least two case study communes, the research found that poor households were not aware of available support. This indicates there was both a need for improved information sharing on the part of water service providers and/or commune officials, and an opportunity to increase rates of access by poor households if available support mechanisms were more widely known.

The interviewees reported that support mechanisms (such as subsidies and grants) offered to PEs via development agencies and government incentives were not evenly applied. This has resulted in prices paid by householders varying from commune to commune, and from province to province. This has ramifications for poor households and inequality.

Comparing service-provider types

The analysis presented thus far has shown that PEs have, on the whole, been more able to offer subsidies and flexible payment options than 'other' service providers. At the same time, the median connection and tariff rates of PEs were often higher, and this could have had adverse affordability implications. In addition, it should be noted that the ability of PEs to offer subsidies and exemptions more often than 'other' service providers may be due to their autonomous, flexible management arrangements, and also funding provided by donors (and the conditions of the funding). It is not known whether PEs provide the most efficient way of delivering water services to these communities, particularly in the face of the reported lack of high-level water management planning in rural Vietnam.

Commune leaders and service providers (both PEs and 'other' types) were asked to rate which type of entity was best able to reach poorer and more disadvantaged members of the community. Their answers varied across different types of respondents in both regions. According to PEs and commune leaders, the factors that led to service providers being better able to serve the poor included having:

- the financial resources needed to be able to invest in infrastructure
- autonomy about deciding whom to serve
- the human and financial resources needed to reach the poor
- fast response rates (to leaks)
- better management of late payments
- flexibility offered by the service provider
- good management
- high water quality.

Any type of water service provider able to fulfil these criteria may be better able to serve poor householders than those without these qualities or standards.

The case study analysis did not reveal strong differences between service provider types in terms of their success in reaching poor households. The major influence on the connection rates of poor households was found to be whether or not support mechanisms were in place to encourage poor households to connect.

Water User Associations and community-managed schemes tended not to provide support which focused on poor households. One reason was that these schemes typically relied on investment from participating households, and support for the poor would require cross-subsidisation in the form of additional investment from member households. Another reason was that these schemes required often-complex processes of collective decision-making, which may have served as a barrier to the provision of poor support mechanisms if consensus on their appropriateness could not be reached. This was not a barrier for enterprises, who could decide autonomously to offer pro-poor support.

When asked if water services managed by women were more or less likely to serve the poor well as compared to those managed by men, respondents on the whole responded that they did not know. A few respondents thought that female-headed enterprises would be more likely to serve the poor, however most thought that gender was not important. Given the small data set for this area of research, further inquiry is needed to better understand the gendered dynamics that may be influencing who takes up the opportunity to be a small water enterprise, and what this means for the community as a whole.

FIGURE 15 WATER SERVICE STAFF AND RESEARCHERS MAPPING WATER SERVICE AREA BOUNDARIES

FIGURE 16 A PRIVATE ENTERPRISE OWNER SHOWING CERTIFICATES GIVEN TO HIM BY THE COMMUNITY

FIGURE 17 RAIN WATER COLLECTION POTS IN SOUTH VIETNAM

CONCLUSION AND IMPLICATIONS

Overall, in the absence of civil society organisations (non-government organisations) or government policies driving a focus on the poor, water operators did not offer consistent support for poor people within their water service areas. This indicates a need for pro-active policies requiring service providers to focus on reaching poor households, so that gaps between poor and non-poor access can be addressed in current and future water schemes.

The research revealed different approaches and roles in decision-making in the two regions. This influenced the service delivery approach that was adopted, and also highlighted that understanding who has power in decision-making is important for identifying pro-poor mechanisms (and whom to target) to ensure the poor are reached. The choice of mechanisms needs to be based on a regions' political economy context.

Additionally, the significant variations in connection fees and tariffs *within* communes leads to inequalities of the price of water services within and between communes. Water operators across all six case study communes focused on increasing customer demand for water as their strategy to increase revenue and remain viable. Therefore, consideration of sustainable extraction rates (particularly in areas drawing from groundwater) is a critical need, but not one that was not a focus of this study.

Finally, water quality emerged as an issue in all case study communes. Householders expressed significant concerns about the impacts of industrial and agricultural pollution on water quality, and they expressed scepticism about whether treatment processes were sufficient to deal with these pollutants. While this research was not able to assess the validity of these concerns, there was a clear need for greater attention on water quality including regulating contaminants at their source, ensuring piped water meets Ministry of Health (MoH) standards, and increasing awareness of the actual quality of piped water so that rural householders are protected.

This research made four key findings related to inequality of access and services. These findings, and the implications they have for civil society organisations (CSOs) working to increase access to communities, including poor householders, are shown in the Table 4 on the next page.

TABLE 4 ROLES THAT CIVIL SOCIETY ORGANISATIONS (CSOS) CAN PLAY TO DRIVE EQUALITY OF ACCESS TO PIPED WATER SERVICES IN RURAL VIETNAM

'Enterprise in WASH' research findings: piped water services in rural Vietnam*	What CSOs can do to drive equality of access to piped water services
Finding 1 Poor householders sometimes paid higher connection fees to access piped water services than non-poor households in the selected study areas in rural Vietnam.	• **Find out where the poor live** and whether or not they experience barriers to accessing piped water schemes. • **Work with governments** to identify how equitable tariff arrangements could be implemented, including cost-sharing/postage stamp pricing. • **Advocate** on development aid working groups and with multilateral donors for the design of inclusive WASH funding initiatives at the national level. • **Encourage governments** to incentivise enterprises to reach the poorest and most remote communities. • **Work with governments and enterprises** to regulate tariffs so that pricing is consistent, fair and transparent.
Finding 2 Connection fees were the main barrier to poor households accessing piped water services.	• Find out in your context **what the main barriers are** for poor households. Are these barriers due to connection fees or other factors? • Consider how **poor households can be supported** with one or more of a range of options including: performance-based programs which explicitly require connections to poor households in their funding conditions; smart subsidies covering expenses such as connection fees; tariff arrangements that incorporate connection fees; and flexible payment arrangements.
Finding 3 Piecemeal service coverage disadvantaged the poor since poor households sometimes lived far away from the main pipe network. Some PEs struggled with a lack of economies of scale which limited the expansion of their networks to remote locations.	• Support **government-planning processes** and coordinate efforts with government strategies for expanding service provision. • Undertake or commission research into **how piped water services can be planned optimally** to achieve economies of scale, and expand services to remote locations, or consider decentralised solutions for remote areas. There is potential to draw on lessons learned from the national bio gas program in Vietnam, in which a flat subsidy is provided for remote areas, and the subsidy goes to the area as a whole, rather than to specific households.
Finding 4 Although water service providers of different types (e.g. enterprises, cooperatives, commune-managed etc.) sometimes offered support mechanisms for the poor, these were not consistently made available or evenly communicated or applied.	• Often poor households did not access subsidies or exemptions, as they were not aware that these support mechanisms were available as a result of inconsistent communication approaches (usually case by case). CSOs can therefore consider **working with PEs (and 'other' providers) to promote support mechanisms** for poor households, and to reach poor households so that they are aware of the options available to them. • Make the **provision and promotion of carefully designed subsidies for the poorest** a condition of performance-based payments, or of grant funding provided by CSOs or government to enterprises. Such subsidies should be made available on a permanent basis and should be available for all poor households (at least at a provincial or regional level). Otherwise, another inequality may be created, in that some poor households in selected locations may receive subsidies whilst others do not. All subsidies are costly and there is an administrative burden associated with implementing them. Hence, appropriate analysis is needed to determine whether support is only needed for connection fees, or whether poor households need support to pay ongoing fees.

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PUMPING EQUIPMENT USED FOR ENTERPRISE DELIVERED RURAL WATER SUPPLY IN THE MEKONG REGION OF VIETNAM

PIPES USED FOR ENTERPRISE DELIVERED RURAL WATER SUPPLY IN THE MEKONG REGION OF VIETNAM

ENTERPRISE IN WASH

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