

Reducing or increasing inequalities? The role of private water enterprises in rural Viet Nam

Melita Grant, Elsa Dominish and Naomi Carrard, University of Technology Sydney; Ly Bui, Hue Ha and Tuyen Nghiem, Vietnam National University, Ha Noi; and Juliet Willetts, University of Technology, Sydney

Safe water, clean water everyone wants to use; however, we are too poor to get access to a water connection. We hope there will be a preferential policy to allow poor people to access safe water

*Householder from Vinh Binh Commune,
Ben Tre Province.*

Introduction

Extreme inequalities are recognised as being detrimental to human rights and economic development (Stiglitz 2012), and in response, the 2030 Agenda for Sustainable Development has explicitly included addressing inequalities as one of the 17 Global Goals. In order to reduce inequalities an integrated approach across multiple dimensions of human development is required, including access to safe water.

This research investigated stakeholder perceptions of rural piped water services in Viet Nam to better understand issues of equality, access and affordability. It asked the question: can poor households access piped water services provided by small scale private enterprises in rural Viet Nam? This question is important because little is known about whether or not poor households access piped water services, related issues of affordability of connection fees and tariffs, and other potential barriers. It is also important because private enterprises are increasingly providing piped water services in Viet Nam, supported by incentives from Government and international donors including some civil society organisations (CSOs).¹

This study focused exclusively on piped water because research shows that it is less likely to be contaminated than other water supply types at both the source and in household water storages (Bain et al. 2014; Shields et al. 2015).

Private sector participation: Are the poor reached?

The Viet Nam Government reported in 2013 that 43 per cent of the rural population had access to clean water based on standards set by the Ministry of Health,² and in 2011, nine per cent had household connections (ILSSA 2013; World Bank 2014). While access to safe water is increasing in Viet Nam, data shows that the highest wealth quintile are gaining access to piped water supplies at a faster rate than other wealth quintiles, and the poorest quintile have a very low level (six per cent) of piped water connections (MICS 2014). This trend is matched globally, with recent monitoring indicating a persistent gap in rates of access to improved water sources between the poor and non-poor (JMP 2015).

While enterprises are performing a critical role in increasing access to safe water in Viet Nam (Kumar et al. 2014), the impact of increased private sector participation on rates of access for the poorest is not known. This research

begins to fill this gap, providing a much needed evidence base to understand the extent to which poor people are being reached by small water enterprises, and what this means for government policy and the role of CSOs and donors.

Literature review

The risk of increasing inequalities through private sector engagement in the water supply sector has predominantly been explored in literature focused on large scale schemes and in particular, privatisation of urban systems (Bakker 2014; Marin 2009; Hailu et al. 2012). Privatisation is considered by many scholars as being at odds with broader goals of universal access to safe water given the monopoly status of water supply services, profit motives, and underlying theoretical problems associated with lack of competition and governance deficits (Tan 2012; Hall and Lobina 2004). The user pays and cost-recovery principles of privately owned and managed water supply systems can be seen to sit uncomfortably alongside human rights principles, and yet the hegemonic discourse on the human right to water is inclusive of market based approaches within the context of the state remaining the primary duty bearer (UN 2010; Baer and Gerlak 2015; de Alburquerque 2012).

From big things, little things grow

The scale of private investment in water services has dropped significantly since 2000 as a result of international pressure from civil society challenging large scale privatisation schemes, shrinking investments in the water services sector due to unrealised profits and contractual conflicts (Lobina et al. 2014; World Bank 2015). Simultaneously, the international development community has shifted its focus to small to medium enterprises (SMEs) engaged in Water, Sanitation and Hygiene (WASH), and the existing and potential role for the domestic private sector (Anderson 2011). These enterprises are wide ranging, and include water kiosk operators, bottled water and water tanker vendors, construction contractors, and small-medium piped water owners and operators (Gero et al. 2013; Mason et al. 2015).

Research on piped water SMEs has provided insights on the effectiveness of different business models and contract types (Ameyaw et al. 2014; Sy and Warner 2014), risks to be managed by government and private sector actors (Ameyaw and Chan 2015; Chan et al. 2015), and models of Public Private Partnerships (Devkar et al. 2013). Opportunities and barriers for small scale private sector operators have recently been explored, identifying that high capital costs associated with piped water systems for treatment and distribution are a barrier to entry, while those that are operating largely remain ineffectively regulated by governments (Gero and Willetts 2014).

What do we know about poor people's access to privatised water services?

Despite increased support for the domestic private water services sector, evidence on whether or not the poorest quintile are reached by these schemes is scant. A systematic review of current evidence on enterprise engagement in water and sanitation concluded that there was relatively limited evidence in the literature on outcomes for the poor (Gero et al. 2013).

One area of research that has received some attention with mixed findings, is whether or not 'pro-poor' policies have been realised, or even implemented, since the poor were added to the privatisation discourse in the late 1990s (Castro 2007). Gerlach and Franceys (2010) found through case study analysis that pro-poor outcomes were constrained by inadequate regulatory frameworks and the failure of universal service obligations to be within the explicit responsibility of policy makers. Conversely, Norman and Parker (2011) found that government contracts with the private sector has improved access for the poor in Kenya. Cases where inequalities were exacerbated by private sector involvement in water services have been documented. In a systematic review of water services in developing countries, Devkar et al. (2013) found that involvement of the private sector was often followed by an increase in connection fees and tariffs which adversely affect poorer sections of society, and that non-payment of bills had led to disconnections at a higher rate than for government managed water services. Additionally, rural, remote and unplanned congested environments are often unattractive to the formal private sector, which are often the environments that have a large proportion of poor residents (Maranon 2005 in Devkar et al. 2013). Research conducted in 2007 looking at case studies in Argentina, Mexico, and England and Wales found that private sector participation in water and sanitation services had 'actually reinforced existing inequalities' (Castro 2007:765).

Methodology

The research was undertaken in 61 communes in Viet Nam (the third level administrative division of government) across eight provinces. The primarily qualitative study was based on semi-structured interviews with 316 householders (101 held poverty certificates), government representatives (61 commune leaders and two district leaders) and water service providers (35 private enterprises and 32 other service providers including government and community managed systems). In total, 446 interviews were conducted to inform this research.

Based on the location and socio-political status of the provinces, interviews were categorised into two regions: Region 1 (the Mekong Delta of South Viet Nam) consisting of Tien Giang, Dong Thap, Ben Tre, An Giang and Long An; and Region 2 (North and South Central area) comprising Ha Nam, Thai Binh and Binh Dinh provinces.

The research compared equity provisions of private enterprises with other types of water service providers (including government and various forms of community provision); hence service providers were classified as either

'private' or 'other'. Service providers were asked about the number of households they served, important factors in deciding who was served by a water system and who influenced this decision, the connection fee and tariffs and the existence of mechanisms for supporting poor households. Similar questions were asked of the relevant district and commune leaders. Households were interviewed to determine if they were connected to a piped water service, if any support was available, how much they paid and how affordable it was for them. Those not connected were asked about the reasons why, if they knew about support mechanisms, and how much they would be willing to pay to connect. The responses were compared to reveal variations across the interview types, and between different stakeholders within a water service area.

A systematic approach to data collection was employed, however, it is important to note key limitations including:

- Data quality issues related to inconsistency of in depth of questioning and note taking given the large team of field researchers required to collect the volume of data.
- Difficulty sourcing official data on service provision and rates of access.
- The official Government of Viet Nam definition of a 'poor household' was used in the absence of more reliable measures, but this approach underestimates the number of disadvantaged households, as those classified as 'near poor' would fit within the international standard of poverty (income of less than \$US1 per day).
- Private enterprises interviewed varied in size and management structure, ranging from 100 per cent privately owned and operated, to 50 per cent owned by government and privately managed. Other service provider types were grouped together but included a wide range of management models. This presents a limitation to drawing general conclusions given the diversity in management models encountered in the research.
- It was beyond of the scope of this research to assess the affordability of connection fees and water tariffs in light of overall household income and expenses, and other support systems made available to the poor through social security programs.

These limitations were taken into account during the analysis process. Findings were cross-checked across informant types and instances where data was partial or unclear were excluded from the analysis. Findings were also further validated by a subsequent in-depth quantitative research process, though the content of this paper focuses on the key qualitative findings related to perspectives on access to piped water services.

Findings on inequality of access

The research found that inequality of access to water services is an issue in rural Viet Nam, with poor households experiencing disadvantage in four key ways:

- poor householders sometimes paid higher fees;
- connection fees were a barrier to accessing services;
- piecemeal service coverage disadvantaged the poor; and
- support mechanisms were unevenly applied.

Poor households sometimes paid more

The research revealed several instances where poor households paid more than non-poor households for connection to piped water services, thereby potentially contributing to inequalities in some communes. This was not specific to any particular type of service provider. Poor and near-poor households served by ‘other’ providers (community owned and government schemes) in Region 1 paid higher median connection fees than non-poor households, whereas poor households in Region 2 served by private enterprises paid the highest median connection fees than non-poor households, possibly as a result of being further away from the main network, and/or interest paid for some repayment schemes implemented in Region 2 (see Figures 1 and 2).

Figure 1: Region 1. Connection fees paid by householders to connect to other types of schemes

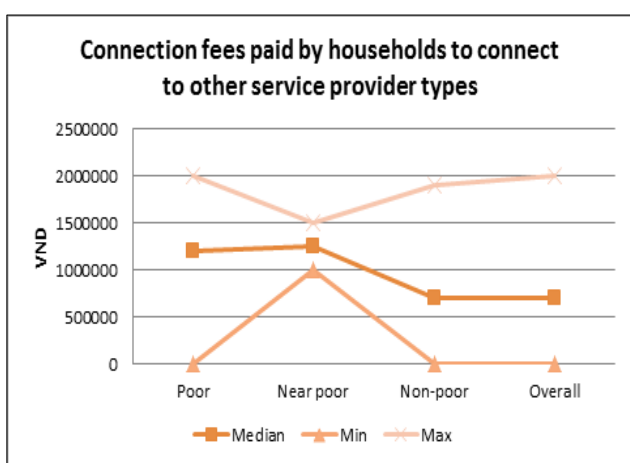
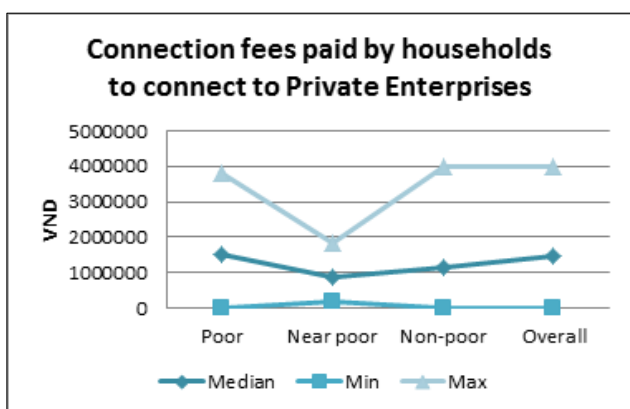


Figure 2: Region 2. Median connection fees paid by householders to connect to private enterprises



Connection fees are a barrier

Poverty was a clear barrier preventing access to piped water, with ‘not affordable’ cited by householders as the primary reason for not connecting to a piped water system in areas serviced by private enterprises (in Region 1 and 2) and by households in areas served by other service providers (in Region 1) as shown in Table 1. Further questioning revealed that affordability constraints related to the upfront connection fee specifically rather than ongoing tariff charges.

Table 1: Householders: Reasons reported for not being connected to a piped water service (n=84).

	Service Provider Type	Region 1		Region 2	
		Private enterprises	Other service providers	Private enterprises	Other service providers
		Mekong Delta		Ha Nam, Thai Binh, Binh Dinh	
	Number of interviewees	n=29	n=8	n=26	n=21
Reason provided as to why household is not connected to piped water	Not affordable	93%	100%	85%	43%
	Satisfied with existing water arrangements			15%	43%
	Think the piped water is polluted				5%
	Was not an option (i.e. the service wasn't offered)	7%			10%

Median connection fees ranged from approximately US\$20 (VND450,000) to US\$67 (VND1,500,000), with some householders paying up to US\$135 (VND3 million). While some poor householders said they were willing to pay for connection, this was most often up to approximately US\$22.

Findings concerning median connection fees for private versus other service providers varied between Regions 1 and 2. Private enterprises charged a higher median connection fee in Region 2 in comparison to other service provider types, but a lower median connection fee in comparison to other service provider types in Region 1. Table 2 shows that private enterprises in Region 2 had much higher (almost double) median connection fees compared with other types of service providers. The situation in Region 1 where private enterprises offered lower median connection fees was likely the result of a higher

Table 2: Connection fees reported by householders and water service providers in rural Viet Nam³

Region 1: Mekong Delta		
Median reported by	Other service providers ⁴	Private enterprises
Water service provider	US\$45 (VND1,000,000) ⁵	US\$33 (VND750,000)
Households ⁶	US\$31 (VND700,000)	US\$20 (VND450,000)
Region 2: Ha Nam, Thai Binh, Binh Dinh		
Water service provider	US\$29 (VND650,000)	US\$67 (VND1,500,000)
Households ⁷	US\$41 (VND918,000)	US\$65 (VND1,450,000)

proportion of free and subsidised connections related to the implementation of a civil society output-based aid (OBA) program designed to facilitate private service provision (Kumar et al. 2014). The size of private enterprises may also be a factor, with those in Region 1 typically smaller and more embedded within the communities they serve compared with those in Region 2.

Variation in reported median connection fees by service providers and their customers demonstrated the inherent challenges in capturing accurate data on this issue in the Vietnamese context. The variation visible in Table 2 is possibly explained by the fact that private enterprises would have been reporting the usual fee charged rather than the discounted rate or the waived fees. The higher rate reported by householders in Region 2 in areas served by other service providers warrants further research to reveal why householders reported paying more than the standard fees reported by utilities.

Piecemeal water service area coverage disadvantages the poor

Service coverage of piped water was piecemeal and services had often been developed organically in response to demand from community members as opposed to through long-term systematic master planning. This had implications for reaching householders far away from the main pipe network, and may have resulted in constraining equitable cost sharing across communities. Some private enterprises reported struggling with economies of scale, resulting in limited expansion of networks to remote locations.

Support mechanisms were unevenly applied

Support mechanisms for the poor were not consistently available or applied across providers. Often poor householders did not access subsidies or exemptions, as they were not aware of their availability.

Interviews with 35 private enterprises and 32 other types of service providers found that although private enterprises sometimes had higher connection fees and tariffs, amongst our sample, they were also more likely to offer support mechanisms to the poor than other types of service providers. These included:

- **Subsidies or exemptions for the connection fee:** Private enterprises were more likely than other service providers to offer subsidies or exemptions for the connection fee, around 50 per cent compared to 20 per cent in Region 1, and 40 per cent compared to 13 per cent in Region 2.
- **Subsidies or exemptions for the tariff:** Private enterprises were more likely than other service providers to offer subsidies or exemptions for the water tariff, particularly in Region 1 (around 70 per cent compared to 15 per cent).
- **Late payments:** No major difference found between provider types.
- **Instalment payment plans:** No major difference found between provider types.

Private enterprises were more likely to offer support mechanisms on a case-by-case basis at the discretion of the owner because of their relatively high degree of autonomy from the government in decision-making processes, as

compared with other service providers. For example, some private enterprises preferred to apply their own categorisation of a 'poor household' rather than offering support to those with an official poverty certificate. It was also found that most private enterprises did not keep records on which households were poor in their service area.

Some private enterprises were supported with funding from East Meets West Foundation (EMWF) with output-based funding to connect households. Poor households were not specifically targeted as part of these programs, however, enterprises were provided funding to connect all householders within the specified area in order to receive the payment. The presence of external support from EMWF was therefore another factor contributing to the inconsistency in the provision of pro-poor mechanisms among private enterprises, as only some enterprises included in the research were donor supported.

Households were often unaware of available support mechanisms

Among the private enterprises offering subsidies, targeting the poor was reported to be their priority. However, household interviews revealed a discrepancy between what water service providers stated they offered, and what was known to be available and accessed by households.

Overall, most households interviewed did not know that subsidies or exemptions existed or how to access them. Almost all non-connected poor households served by private enterprises in Region 1 who reported affordability as the main barrier did not think that subsidies were available to them. Of those poor households who were connected, 90 per cent reported knowing that a subsidy or exemption was available, showing the impact these mechanisms can have on connection rates for poor households.

Discussion

Findings from this research show some alignment with the limited literature available on outcomes for the poor resulting from private sector engagement in water supply sector, in particular, cost being a barrier to connection and existing inequalities potentially being further entrenched.

Cost is a barrier to connection

Affordability issues are not exclusive to services provided by the private sector, but as noted by Devkar et al. (2013:74) a public authority is less likely to enact disconnections for non-payment than the private sector given the political consequences that may ensue. At the same time, affordability issues for the community have been found to be present in both public and private water management systems (Hailu et al. 2012:2575). The present research supports this observation in that householders in both areas served by private enterprises and other types of service providers largely cited non-affordability as the reason they were not connected.

The literature review identified studies exploring the tensions between business viability and affordability (Ameyaw 2014; UN 2010). This was clearly found in our

interviews with private enterprise owners, who expressed that geography was the biggest impediment to serving poor who often lived far away from the main service area. They also cited the inability of poor households to pay connection fees and tariffs, and the fact that poor householders use little water, as disincentives to promoting or prioritising connections for the poor.

Inequalities exacerbated

Some studies concluded that privatisation has not helped the poor (Castro 20017; Bakker 2014; Lobina et al. 2014), but this research is predominantly focused on larger scale piped water systems. Nevertheless, given the fact that affordability was revealed to be a major barrier to poor householders in the present study, it can be inferred that these schemes have been of less benefit to poor than non-poor householders, and may have resulted in further disadvantage if less safe forms of water, and/or more expensive options such as bottled water are relied on instead of piped sources.

Implications of findings to policy

‘An effective private sector needs a strong public sector’ (Carter and Danert 2003:1069). This research points to a range of important actions for the Government of Viet Nam and other stakeholders at national and provincial levels. Actions both to support appropriate and effective participation of the private sector, as well as to support the overall rural water sector (including all types of service provider) are required if equality of access is to be achieved. Importantly, there must be a strong focus on sustainable business models for ongoing service delivery, and a proactive, transparent and consistent approach to supporting poor householders to connect to piped water schemes.

As Gerlach and Franceys conclude, in order to facilitate pro-poor goals and the principle of universal access, regulators need to better understand the needs of the poor, the range of delivery service mechanisms, and creative ways to subsidise services (2010:1236). In line with this finding, this study recommends that government budget support mechanisms for private enterprises include a requirement that support mechanisms for connections are provided to the poor and near-poor, potentially implemented using an output-based approach.

Conclusion and future research

The evidence available to date suggests that both private provision and other water services models can present risks to equality. Poor households can miss out on piped water services when measures to counteract barriers of affordability and inaccessibility are not taken. While the focus of the present research considered the impacts of private water provision, it is important to note that many of the findings also applied to government and community service providers, indicating a need to focus on reducing inequalities in piped water provision more generally. Yet with private service delivery increasing in line with national policies in Viet Nam and more generally in the global WASH sector, it is essential to consider the particularities of private service models and establish effective regulatory mechanisms to

ensure the expansion of piped water systems does not increase and entrench existing inequalities.

Future research could focus on questions emerging from this study. Other aspects of disadvantage such as gender inequality and disability discrimination were beyond the scope of this research but are important areas requiring further attention. Deeper analysis of pro-poor policy and program responses is also needed, in order to understand what the most appropriate and effective mechanisms of intervention could be to reduce inequalities in access to piped water. Finally, further research is warranted to better understand why the poor in some cases are paying higher median connection fees than non-poor groups.

The findings of this research provide an important evidence base for Viet Nam, and point to the need to urgently address inequalities in rural water supply, especially as the domestic private sector emerges as an increasingly important player. Access to water is one essential dimension of equality, and this research has demonstrated that without specific and evidence based measures, poor people are likely to be excluded from accessing improved water supply services.

Notes

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- 1 An example of which is the Viet Nam Government’s 2009 policy (Decision 131/2009/QĐ-TTg) which provides financial incentives to encourage the investment and management of water supply schemes for rural areas. Similarly, Decree 15/2015/NĐ-CP on public-private partnerships (PPP) issued in February 2015 outlines the Government’s role in regulating, and facilitating PPPs.
- 2 Standards are outlined in the ‘National Technical Regulation on Domestic Water Quality’ issued by the Viet Nam Government Circular: QCVN02/BYT.
- 3 USD equivalents for connection fees have been provided based on current exchange rates for an international audience, however, these should be treated with caution since exchange rates have been variable over the relevant period.
- 4 Please note that ‘other service providers’ consist of seven types of entities, each with different governance models, levels of financial assistance, and size of customer base.
- 5 As of 1 April 2016, VND1,000,000 is equivalent to USD\$45.
- 6 Note that this includes free connections (zero paid) where this was reported by householders.
- 7 Ibid.

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