

The Experience of Small-Scale Water Providers in Serving the Poor in Metro Manila

Increasing Access

Effectively Meeting Consumer Demand

Small-scale water providers are effectively providing water services to the poor in Metro Manila. This Field Note describes their ability to remain financially viable while providing the poor with water supply that is both affordable and accessible.



Small-scale water providers in Metro Manila are diverse and cater to different groups of customers—some affluent, others poor, but all with varying needs.

Executive Summary

Small-scale water providers continue to supply water to many parts of Metro Manila. Some providers cover all the water needs of a household, while others supplement the services of the major water concessionaires operating in the city. A WSP-EAP study of 10 small-scale water providers in Metro Manila identified five different types of water providers, with each type employing its own business model and catering to different groups of customers. Some providers show an exceptional ability to serve poorer segments of the city. The study found that a high proportion of the poor rely on water services supplied by small-scale water providers, but that these households pay a higher unit rate for the water than their more affluent neighbors. The study yields a number of recommendations, including rationalizing the price of water for poor customers, improving service efficiencies to reduce the costs of supplying water, and developing collaborative relationships among the government regulator, utility, and small-scale water providers.

Introduction

Twelve cities and five municipalities make up Metro Manila. This mega-metropolis has a population of 11 million people.¹ In 1997, the government awarded 25-year concessions for the provision of water and sanitation services in the East Zone and West Zone of Metro Manila to two private parties—the Manila Water Company and Maynilad Water Services respectively. These companies took over the operations from the state-owned Metropolitan Waterworks and Sewerage System, which was struggling to expand its services in the burgeoning metropolis.

At the time the concessions were awarded, a number of small-scale water

providers (SSWPs) were already filling the gaps in service coverage left by the former water utility—as much as 30 percent of the population relied on these SSWPs.² The concessionaires in Metro Manila now have high service coverage—85 percent in the West Zone and 93 percent in the East Zone.³ Yet, a number of households continue to depend on SSWPs.⁴ In many cases, SSWPs provide water to cover all households' needs. Some supplement the service of concessionaires when the latter are unable to provide a sufficient or reliable supply. Though SSWPs in Metro Manila and those in other metropolitan cities in the developing world fill a critical need by providing water supply services, little is known about their operations, and

unfortunately myths persist around their offering poor quality services at exploitative prices.

To explore the way SSWPs function and to gain a candid understanding of the factors that contribute to their sizeable presence in Metro Manila, WSP-EAP undertook, with support from AusAID, a study, “Small-Scale Independent Providers: Are They Here to Stay?”⁵ A major objective of the study was to determine whether SSWPs play an important role in providing water services to the poor.

In summary, the study found that SSWPs in Metro Manila are diverse and cater to different groups of customers—some affluent, others poor, but all with varying needs. As a result, business practices differ among them, as do their overall performance in delivering water supply services to customers. Some SSWPs, however, showed they are very effective in serving a higher proportion of poor customers within the same service area as the utility companies serve. The study highlighted that SSWPs play an important role in serving the underprivileged metro dwellers, especially in the context of rapid urban development where acute capital shortages constrain short- to medium-term investment. This finding draws attention to the need for better understanding of the measures needed to effectively draw SSWPs into the supply system as key partners in providing services to the poor in Metro Manila. This Field Note therefore explores some of the constraints and policy implications related to engaging SSWPs in providing water services to the poor.

¹Philippines National Statistics Office (2000)

²David and Innocencio (1996)

³Metropolitan Waterworks and Sewerage System (2001)

⁴Van den Berg and others (2002)

⁵Readers can access the full report online at www.wpep.org.

Measuring the Performance of SSWPs

In order to measure the performance of a broad range of SSWPs, the Metro Manila SSWP study selected different types of SSWPs from different locations. These included real estate developers, homeowners associations, local entrepreneurs, and water truckers in 10 locations primarily in the East Zone of the city. The performance of SSWPs was measured against predetermined financial, institutional, operational, social, and environmental indicators. In each of these aspects, SSWPs were scored and then ranked from worst to best. These scores were then aggregated to demonstrate overall performance. In many cases, the impact of chosen parameters was viewed as interlinked. For example, tariff

levels affect profit margins, and consequently affect the operations of a water system, while also affecting the affordability of services, especially for poor consumers.

This Field Note focuses on the social performance of the SSWPs in delivering water services. Three indicators were used to measure social performance—access, customer satisfaction, and affordability (see Box 1).

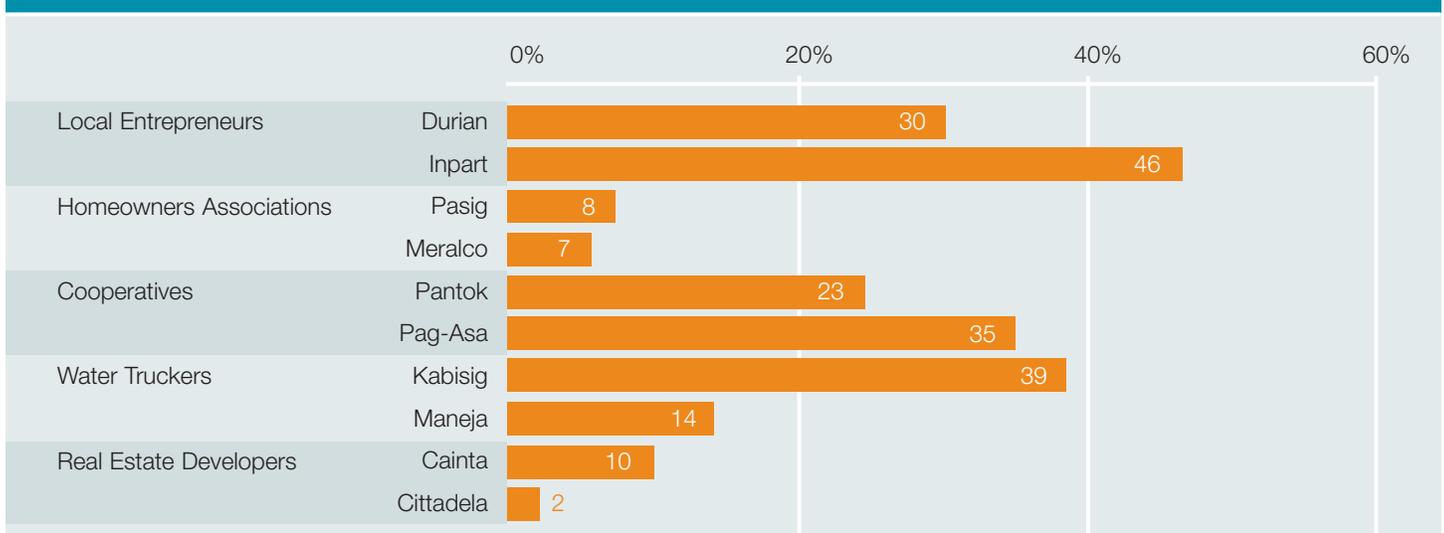
The Access of the Poor to Water Supply Services

SSWPs serve a significantly higher proportion of poor households. In 2000, for example, 23 percent of SSWP customers were living below the prevailing official poverty threshold,⁶ while the total level of poverty in the metropolis was only 11.4 percent. Figure 1 disaggregates the question of access in relation to the

different types of providers. The percentage of poor customers served differs significantly among SSWPs.

- Housing estate providers (real estate developers or homeowners associations) serve a much more affluent segment of the population than all other SSWPs combined. On average, just 7 percent of their customers live below the poverty level.
- In contrast, local entrepreneurs (private parties who are engaged in constructing and operating independent water supply systems) seem to serve the highest number of poor, with 38 percent of their customer base at or below the poverty line. One firm, Inpart Engineering, particularly stands out in its coverage of the poor, as nearly half of its customers live at or below the poverty line. Eighty percent of its customers who receive water delivered through hoses are poor.

Figure 1: Access of the poor to water supply services



⁶The official poverty threshold for Metro Manila for 2000 was based on a household income of Php 9,450 a month, or approximately US\$170 (National Economic and Development Authority, 2000).

Some customers who do not have house connections spend up to 16 percent of their monthly household income on water, while those with house connections spend about 6.1 percent of their monthly household income.

- Cooperatives are legally registered associations of water users. Thirty-two percent of their customer base is poor, and thus rank second to local entrepreneurs in providing services to poor customers.
- Though water truckers are commonly perceived as a caterer to the poorest segment of the population, the profile of their customers varies significantly. In the Kabisig Floodway (a kilometer-long diversion strip in Cainta in eastern Metro Manila that is home to many informal settlers), for example, as much as 39 percent of those relying on trucked water are poor. However, in Maneja, Taguig (in southern Metro Manila), only 16 percent of the truckers' customers are poor, as the truckers serve a large customer base that includes higher-income groups.

Customer Satisfaction with the Quantity of Water Delivered

Customer satisfaction was measured as satisfaction with the quantity of water delivered. Though satisfaction clearly relates not only to water availability but also to other aspects, such as price, quality, and continuity, it was not feasible to incorporate these variables in the analysis.

Figure 2 illustrates that customer satisfaction with the quantity of water delivered is similar and consistent across all types of SSWPs, including real estate developers, homeowners associations, local entrepreneurs, and water truckers. The two exceptions being among residents of Cittadela Executive Homes in Las Pinas (where satisfaction is low because of serious water

Box 1: SOCIAL PERFORMANCE INDICATORS	
Indicator	Ranking Procedure
Access of the poor to water supply services	The higher the access of the poor to water supply services, the higher the ranking
Customer satisfaction with quantity delivered	The higher the customer satisfaction, the higher the ranking
Affordability of water tariffs (user's capacity to pay for water tariffs)	The lower the affordability, the higher the ranking

shortages) and among the members of the Pag-Asa Water Cooperative in Binangonan, Rizal (where water is supplied only four hours each day). Notably, consumers with or without piped water show no difference in the level of satisfaction with the quantity of water available.

Affordability of Water Tariffs

Affordability or ability to pay is measured as the amount households spend on water as a percentage of their monthly household income. Services are considered more affordable if the percentage of income spent on water is lower, as this means the poor will have more to spend on other essential goods and services.

Figure 3 indicates that overall affordability (cost of water) averages about 3.2 percent of monthly household income. However, disaggregated data suggest that customers with piped water pay much less (2.4 percent of monthly income) than those without piped water (6.6 percent of monthly income). The difference is

significant considering that the latter group also tend to be poorer.

Among the sampled SSWPs, the percentage of household income spent on water is highest for customers served by local entrepreneurs. Some customers who do not have house connections, for example, spend up to 16 percent of their monthly household income on water, while customers with house connections spend about 6.1 percent of their monthly household income.

Customers relying on water truckers spend about 5.3 percent of their monthly household income on water. Customers served by cooperatives, real estate developers, and homeowners associations spend about 2 percent or less. Meanwhile, poor households that are served by the private concessionaires pay much less for water (based on a unit rate) due to the lower levels of tariffs charged. Poor households served by Manila Water in the East Zone spend less than 1 percent of their monthly income, while those served by Maynilad Water in the West Zone spend about 1.7 percent.

Ranking of Small-Scale Water Providers

Figure 4 combines the three indicators—access to water by the poor, affordability of water tariffs, and customer satisfaction with quantity delivered—and ranks the overall social performance of the SSWPs. Social performance differs significantly among the cases studied. Importantly, there seems to be a trade-off between serving the poor and affordability. In general, serving the poor correlates with charging higher rates.

However, community-managed systems seem to present an alternative to this general observation. Members of the Pantok Water Cooperative in Binangonan, Rizal, and residents of Barangay Durian in northern Metro Manila, for instance, show

that community management can assist in delivering services to a high proportion of poor customers without having to resort to high prices.

In Durian, bulk water is supplied by the utility through a main line at the road head and a bulk water meter. This is known as a “mother” meter and is installed to keep track of the aggregate consumption of water. A resident entrepreneur, acting as a “retailer” of the water supply for the community, pays for the meter, connects individual houses to the main line, performs billing and collection, and maintains and repairs the network. However, the position taken by the resident entrepreneur is actually one of a trustee and manager of the community water supply. He or she does not profit from the sale of the water and regularly reports on the financial status of the venture to the community.

Conclusion and Recommendations

Several types of SSWPs, most notably the local entrepreneurs, truckers, and cooperatives, tend to serve a disproportionate number of poor. With the exception of the cooperatives, these SSWPs also tend to charge the most expensive rates, largely because they use many intermediaries in the provision of their services, which adds to the cost of delivering the service.

The combined evaluation of the financial, institutional, operational, social, and environmental performance of SSWPs, and the analysis of their financial, economic, and stakeholder environment does not appear in this Field Note but the broader analysis was taken into consideration to propose the following specific measures

Figure 2: Customer satisfaction with the quantity of water delivered



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that can be taken to reduce the burden on the poor.

Rationalize Bulk Water Rates

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The study suggests it would be better if the regulator, the Metropolitan Waterworks and Sewerage System (MWSS) Regulatory Office, could help reduce the burden on SSWP customers by rationalizing water rates through the introduction of bulk water prices. The study suggests that this would be far more advantageous in the short- to medium-term than trying to connect the poor to the utilities.

By reducing the cost of bulk water, taking into account the fact that bulk water is

cheaper to provide than water directly supplied to residential consumers, the poor could benefit significantly.

Improve Efficiencies of Concessionaires and SSWPs

A decline in non revenue water can significantly reduce the costs of operation and maintenance and hence the water rate. The poor, especially those depending on water delivered through bulk water arrangements, can benefit directly from such efficiency improvements.

The percentage of non revenue water across the SSWPs is low, with average losses ranging from 1 to 20 percent. In contrast, there is ample room for improvement in the concessionaires' operations. In 2001, for example, non revenue water for the concessionaires stood at 51 percent for Manila Water and 68.2 percent for Maynilad Water. For SSWPs, on the other

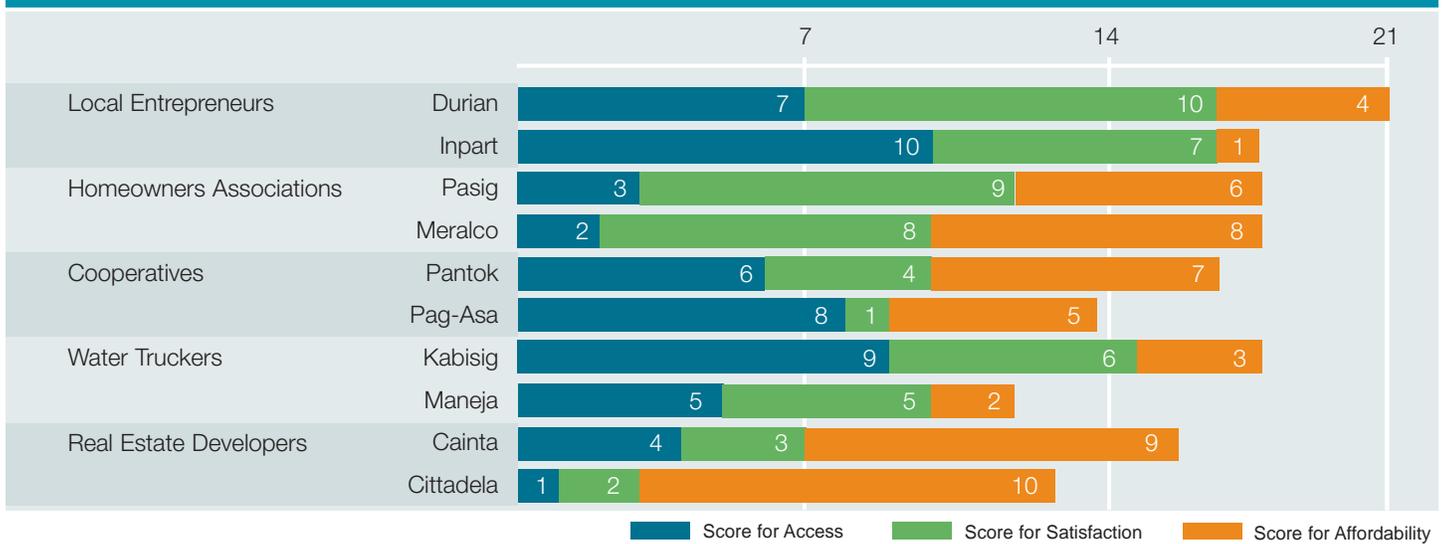
hand, the key to improving efficiency will be reducing labor costs. In most SSWPs, labor costs are the chief factor in keeping the price of water high. Water truckers and cooperatives tend to have particularly high labor-intensive operations, with labor costs making up more than 50 percent of their total operation costs.

Reduce Connection Fees for the Poor

The study found a strong negative correlation between the numbers of poor served and the amount of connection fees charged to customers by SSWPs. The higher the connection fee, the lower the percentage of poor with access to SSWP services. This suggests that connection fees are a significant hindrance to poor families in accessing the water supply from existing systems. In some countries, such as Brazil, connection fees are often considered as part of the investment costs that are charged

Figure 3: Expenditure on water as percentage of household income



Figure 4: Ranking of SSWPs by social performance

through the tariffs. This reduces the barrier to connect but may be less of an option when relatively large parts of the population are not being served. Hence, it may be advisable to introduce the connection fees as part of the total investment plan, and let all customers pay for them. This option may be more appropriate than what was practiced in the past where connection fees were often waived to entice households to connect to the system.

Explore Cooperatives as a Management Model

Although the sample of cooperatives in the present study is limited, they do appear to offer a viable management model, at least in the less densely populated areas. This conclusion is also supported in a separate study on management models for small towns water supply in the Philippines.⁷ Consequently, this type of SSWP has

definite potential in bringing more universal service to the Metro Manila region.

Review Existing Regulations

Whether the tariffs charged by SSWPs should be regulated depends mainly on whether they are excessive. A review of the average price per cubic meter of water charged by SSWPs provides little evidence that SSWPs charge excessive prices. Consequently, the need for their economic regulation may not be as pressing as often thought. In fact, from the current pricing policies of the SSWPs investigated in the study, it is not obvious whether the cost of regulation would exceed its benefits. It seems the threat of competition, either from the concessionaires or from other SSWPs in the market, is a good substitute for economic regulation, as it keeps the price of water competitive, albeit not necessarily low.

Another rationale for regulating SSWPs, however, is rooted in public health concerns over the quality of water they provide. Notably, water quality regulation is already in place—the Sanitation Code of the Philippines requires all municipalities to have a local drinking water quality monitoring committee, and other legislations provide for routine water safety testing. In general, however, the enforcement of regulatory provisions requires improvement. Nonetheless, it is interesting that the majority of SSWP consumers tend to rate the quality of the water high, with about 80 percent of customers characterizing the water supplied to them as drinkable.

Collaborate to Serve the Interests of the Poor

In the prevailing context, the study concludes that SSWPs have a comparative

⁷Robinson and Test (2003)

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advantage in the delivery of water services to poor customers. The potential for collaboration between SSWPs and concessionaires is thus high, especially for SSWPs that take water from the concessionaires through bulk supply and then sell to clients.

By making the arrangements between SSWPs and concessionaires more transparent and efficient, it is possible to use SSWPs to serve poorer populations, and hence lower costs for the consumers. Expansion from a Build, Operate and Transfer (BOT) arrangement with the local government to an arrangement that more explicitly includes the concessionaires can be helpful in accelerating service provision to the poor. However, such collaboration requires an agreement with the regulator as to what constitutes an acceptable quality of service for the poor. The current concession contracts allow service delivery

by third parties as a means to expand coverage, but when SSWPs take over that responsibility from the concessionaires in the future, the regulator needs to confirm that this is acceptable. This transfer is bound to have an impact on the service levels provided and the pricing policies of the concessionaires.

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