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Rita Padawangi

Building Markets through Quenching Thirst: Clean Water Supply for the Urban Poor in Jakarta and Manila

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Building Markets through Quenching Thirst: Clean Water Supply for the Urban Poor in Jakarta and Manila

Rita Padawangi

ABSTRACT: Water is a key necessity for life. However, in developing megacities where income and social inequalities are prevalent, access to clean water often becomes the luxury of the advantaged social groups. In Jakarta and Manila, the involvement of public financing institutions have pushed for privatisation of water provision and distribution services several years back. Often accused by advocacy groups of not serving the interests of the poor, private water companies in both cities do expand their services to urban poor communities through various programs, with the support of public financing institutions such as the World Bank and the Asian Development Bank. This paper looks at the various programs for water supply for the urban poor in Jakarta and Manila, including those supported by the Global Partnership for Output-Based Aid (GPOBA) program, and analyse the extent to which these programs have played a role in expanding the water service market. In-depth interviews of representatives of the water service companies, representatives of the urban poor communities, and empirical information about the programs allow this chapter to critically examine these programs in understanding the relationships between public institutions and the incorporation of the urban poor as water consumers. These programs are often not as straightforward as they seem, especially with necessary maneuvering in-between entangled social settings as well as re-crafting established social relationships that were incompatible with the market system that is supposed to be put in place.

Introduction

As the capital city of Indonesia, Jakarta has a special status in the country. It is not just a city, but known as the Special Capital Region (Daerah Khusus Ibukota/DKI), on the same level as the provinces. The centralised development policies have concentrated much resources and political powers in Jakarta, which in turn made the city a magnet for many migrants within the country to settle and look for better livelihoods.

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1 Rita Padawangi is a Research Fellow at the Institute of Water Policy, Lee Kuan Yew School of Public Policy, National University of Singapore.

Draft Paper: Not for Citation
With a population over 8.5 million in 2011\(^2\), pockets of urban poor communities are identifiable throughout the city. Although there are rental and owner-occupied public housing schemes, the coverage is very limited, besides the fact that the planning and the management are poorly coordinated\(^3\). This has an impact on the living conditions of Jakarta's urban poor population.

Most of Jakarta’s urban poor live in landed housing units. However, these communities may not have adequate infrastructure provisions, including water, for several reasons. Firstly, while water tariff is set the lowest for those who live in smaller houses (less than 28.8 square meters), these low tariff disincentives service providers to provide connections because they are not strategic target markets. Secondly, their property may not have legal status. When they are considered illegal squatters, by law they are not entitled to have individual water connections. They are provided through public hydrants, or more recently, master meters.

Meanwhile, Metro Manila is an even larger metropolitan area. The capital city of the Philippines consists of 16 cities and one municipality, with a total population of over 11 million in 2010. Metro Manila also grapples with informal settlements. However, in terms of water supply coverage, water for the poor programs by the two private operators had been in place for a longer time. Currently, Manila Water Company at the East Zone boasts that they have covered 100% of the population. The water kiosk system and are particularly dominant in the water for the poor programs, but recently the program for the urban poor is moving more towards individual connections through master meter systems.

This paper revisits the notion of compatibility between private sector water service operators with pro-poor initiatives. With the water supply challenges faced by poor communities in Jakarta and Metro Manila, this paper analyses the extent to which the Global Partnership for Output-Based Aid (GPOBA)-sponsored programs have played a role in expanding the water service market and delivered benefits to the poor at the same time. Through analysis of documents relating to the GPOBA Water Supply programs in both metropolitan regions, in-depth interviews with officials and community members, the analysis critically covers the compatibility between basic needs provision and market expansion.

\(^2\) Figure from Dinas Kependudukan dan Catatan Sipil Provinsi DKI Jakarta, http://www.kependudukancapil.go.id/index.php?Itemid=63&id=4&option=com_content&view=article

\(^3\) A report in *Kompas* newspaper on 28 February 2011 indicated that many units from “1000 flat program” were abandoned because of the lack of supporting infrastructures. In Cakung Barat, an area in Jakarta, for example, the flats were built first but water and electricity were not sufficiently provided due to the limited supply. (*Ribuan Unit Rusun Telantar*, Kompas, 28 February 2011)
Water as public good and the logic of capital

The debate on water as public good and economic good has been around since the private sector participation in water supply service delivery came under the spotlight, especially with the support of the multilateral financing institutions in the early 1990s. The nature of water as one of the key necessities of life precedes the view that it is unethical to deprive people of water because they cannot afford it. There were also religious and cultural values that specifically states water should not be sold, since it is a gift from God. Bakker (2007) noted that the anti-privatisation debates on water has become a campaign for the human right to water and obtained support from the World Health Organization (WHO) and the United Nations Development Program (UNDP).

Supporters of private sector involvement of water services, however, argued that in order to ensure satisfactory service delivery, the water utility that runs the service has to be ensured enough revenues to cover the operation and maintenance of the system. This is particularly intense in cities, especially at the scale of Jakarta and Manila. This trend is shown by Figure 1, which shows the percentage of cities with private sector water operators in 2006. Not only is the water supply network vast and covering many types of uses, the management of water supply is, more often than not, a political matter rather than a technical issue. There is also no guarantee that not-for-profit entities or the public sector can run the services well, as had been proven in both Jakarta and Manila. The public sector was deemed incapable to deliver the level of services and in 1997 entered 25-year concession agreements with two private sector entities in each city to produce water, deliver water to the consumers, and maintain the network.
Figure 1. Percentage of cities over one million population with water services operated by the private sector, by region (Source: Araral, Wu, Padawangi, & Chen-Zimmermann, 2009)

With cost recovery and corporate principles in place, water supply service has officially become a commodity in these two cities. Following the logic of demand and supply, it makes sense, since the two cities rely heavily on surface water from the countryside. The water utility companies operate on the basis of adding value to the water produced, by processing the water from the source through treatments before delivering them to the customers. The maintenance of the water network is also a component of that value. From this perspective, the consideration for privatisation of water services and the treatment of water supply service as commodities make sense. The people who consume the water enjoy the value that was produced by the water utility companies. They were considered not able to produce reliable potable water on their own, hence were subjected to paying for water services.

It is also important to highlight that the commodification, in the cases of Jakarta and Manila, occur on the level of service and not on the water itself. Bakker (2007) highlighted the misleading notion of associating water privatisation as the antonym of the right to water, because the privatisation of water services does not translate into the privatisation of water, unlike that of privatisation of property rights. However, the emphasis on the cost recovery of water utilities placed much emphasis on the importance of converting people to accept that water service is a commodity. Water is a basic need that people cannot live without, is part of the environment, and in many places is part of social and cultural life. In practice, it is difficult to separate water supply and water supply service, because the service output is measured and valued by the volume of water.

Moreover, the implementation of for-profit schemes on water supply service would inevitably lead to market monopoly in the city. Even when there are two operators in a city, both would operate in different areas. When water supply service is treated as a commodity, water would be more accessible to those who can afford more and would not be as accessible for those who do not have sufficient means. Swyngedouw (2005) quoted Engels’ writing on the living conditions of the working class in Manchester (1845), “... they are deprived of all means of cleanliness, of water itself, since pipes are laid only when paid for, and the rivers so polluted that they are useless for such purposes.” A similar situation can be found in recent Jakarta, but the inability of getting a water connection is not only about affordability. The eligibility in getting a water connection is defined through legally, politically, and socially constructed criteria instead of through the perspective of the right to water.

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4 Many people and businesses in Jakarta also still rely on groundwater. Over extraction of groundwater in Jakarta has contributed to its land subsidence.
to water. This would mean that there would be disparity of access to water based on income, living arrangements, social and political status.

David Harvey (2006, 51) is particularly skeptical of the compatibility between capitalist-driven developments and the poor, since the poor would be lacking the “financial resources to pursue their own rights.” The primary focus of the private sector would remain to fulfill the expectations of the stakeholders, which are typically to generate profits to share. However, the privatisation of water services does not automatically translate into deregulation and privatisation of assets. In the cases of Jakarta and Manila, the private operators do not own the assets, but are responsible for the operation and maintenance for the length of the contracts. The privatisation of water services is difficult to categorize within the debates of neo-liberalisation, the reduction of welfare provision, and the diminishing social solidarity, since the output is usually measured by service delivery.

In cases where the state does not offer a good welfare provision, service delivery by the private sector that is driven by the hunger for market expansion would look more promising. Especially when this view is perpetuated by the mainstream call for market reform in water provision, which is also driven by the push by financial institutions that place much interest in promoting private sector participation (Goldman, 2005). Finger and Allouche (2002) expressed concerns that this trend is “a part of a much larger process of globalisation” that transnational actors increasingly control “such vital goods and needs as water, not to mention the fact that they also control governments,” but they argued that the pattern is irreversible and it was better to think about re-regulating the water sector rather than reversing the trend. Meanwhile, there are cases where campaigns against water privatisation had resulted in the prevention or termination of the contracts (Goldman, 2005; Hall and Lobina, 2006). The main concern in this paper, however, is whether programs such as the GPOBA in water supply would benefit the urban poor, both from the perspective of basic needs fulfillment and in terms of their identities as members of the civil society.

The abstraction of water into commodified numbers that represent the exchange value of the operation and maintenance of the service network would in turn reduce the value of water into price in the tariff structure. Using the term “market environmentalism”, Bakker (2007) saw this trend as using markets to solve environmental problems. “Market environmentalism offers hope of a virtuous fusion of economic growth, efficiency, and environmental conservation: through establishing private property rights, employing markets as allocation mechanisms, and incorporating environmental externalities through pricing...” (Bakker, 2007, 432). The abstraction of water into commodified numbers is more prevalent when water services are corporatised, which is a prominent feature in the privatisation of water service provision and distribution. The monetisation of water services makes it comparable to other needs, such as electricity and transportation, although the roles of the various goods are not the same. This monetisation becomes problematic when...
the price of water services is not ‘as high’ as other goods and thus places it as lower priority compared to electricity, oil or transportation, while in fact water is a key necessity for life.

The existence of pro-poor grant funds from multilateral financing institutions such as the OBA that is discussed in this paper would be one example of how the well-being of vulnerable populations would benefit from the provision of water supply services through the private sector operators, but at the same time raises further ideological questions on the impact of the intertwine between communal and private sector provision of basic needs. Instead of arguing that the privatisation of water services work against the right to water, this paper looks more into the impact of the GPOBA in water supply as pro-poor programs that are entrenched in the capitalist-driven system on the community life as well as appreciation towards water.

**Water supply services in Jakarta**

Despite its status of being a special capital city region, Jakarta’s performance in delivering piped water services for its people has not been good. In 1990, when the population reached approximately 8 million, the service coverage was somewhere between 38% to 42% (ADB, 1997). Meanwhile, the non-revenue water – which typically covers mostly leakage and illegal connections – was hovering around 53%-57% of the water produced. The period of 1980-1990 was one in which Jakarta experienced 35.5% population growth, following a 33.5% population growth in the previous decade. The growth slowed down in 1990-2000 to 1.5% as the surrounding regions developed\(^5\).

The urban poor have been a historically disadvantaged portion of the population when it comes to piped water supply. During the Dutch colonial period that spanned for over three centuries until Indonesia’s independence in 1945, piped water supply was only limited to European neighborhoods, which were typically more well-off than the locals. The poor’s water needs were supplied through public hydrants and water vendors. Water supply was racially differentiated, in which the Europeans consumed 140 liters per capita per day and 90% covered by piped water supply. Meanwhile, the Chinese and other Asians were 60% covered and used on average 100 liters per capita per day. These numbers stood in stark comparison with the natives, who only consumed 30 litres per capita per day and received only 30% coverage (Fournier, Folliasson, Martin, & Arfiansyah, 2010).

After independence, two water treatment plants – Pejompongan I and II – were built as a reflection of modern Jakarta (Bakker, Kooy, Shofiani, & Martijn, 2006). However, at the end of the 1960s, only 15% residents had household connections. Monumental developments, mega projects grew in the city but the service provision tended to lag behind. In 1968, a subsidised network extension only served affluent neighbourhoods. In

\(^5\) The Jabotabek region experienced 45.7% population growth in 1990-2000.
contrast, in 1970s urban villages housed 80% of the population and covered 60% of Jakarta’s land area, but only 10% had access to piped water (Bakker, Kooy, Shofiani, & Martijn, 2006).

In 1997, PAM Jaya – the water utility in Jakarta – entered a 25-year concession contracts with private sector operators that saw Jakarta divided into two service areas. The West Zone was contracted to Suez Lyonnaise des Eaux, a France-based water utility operator and one of the largest private water companies in the world. The East Zone was contracted to Thames Water, a UK-based water operator. Although there were indications of service achievements in the concession contracts – the contracts stated that the operators had to achieve 100% coverage by 2023 --the award of the contracts was inseparable from the fact that both concessionaires were invited by the then President Suharto’s son – Sigit Harjojundanto who owns the Sigit Group – and his business ally – the Salim Group, headed by Anthony Salim (Argo & Laquian, 2004).

Unsurprisingly, there are many criticisms addressed at the two operators after the Suharto era ended in 1998. The private operators continued to manage the water distribution network as the contract had been signed for 25 years, although with changed composition of owners. Since the focus of this paper is the provision and distribution of water supply for the poor, it will not analyse in detail the mechanisms of the concessions, although the parts that are relevant for the urban poor will be discussed.

Both concessionaires claimed that they have made significant progress since they took over the management of water supply network and production in Jakarta. Non-revenue water has been brought down to 43.9% (figure from PALYJA in 2009) in the West Zone and 48.62% (figure from AETRA in 2009) in the East Zone.

<table>
<thead>
<tr>
<th>West Zone</th>
<th>East Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Owner</strong></td>
<td><strong>Owner</strong></td>
</tr>
<tr>
<td>PT PAM Lyonnaise Jaya</td>
<td>PT Aetra Air Jakarta</td>
</tr>
<tr>
<td>Suez Environnement (51%)</td>
<td>Acuatico (95%)</td>
</tr>
<tr>
<td>ASTRATEL (30%)</td>
<td>Alberta (5%)</td>
</tr>
<tr>
<td>CITI Group (19%)</td>
<td></td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td><strong>Population</strong></td>
</tr>
<tr>
<td>4,446,024</td>
<td>4,352,666*</td>
</tr>
<tr>
<td><strong>Customers</strong></td>
<td><strong>Customers</strong></td>
</tr>
<tr>
<td>412,456</td>
<td>382,693</td>
</tr>
</tbody>
</table>

6 Perusahaan Air Minum Jakarta Raya
<table>
<thead>
<tr>
<th>Service Coverage</th>
<th>63.9%</th>
<th>66%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Revenue Water</td>
<td>43.9%</td>
<td>48.62</td>
</tr>
<tr>
<td>Average Tariff</td>
<td>Rp 7,713 (approx. US$ 0.85)</td>
<td>Rp 6,100 (approx. US$ 0.70)</td>
</tr>
<tr>
<td>Volume</td>
<td>380,000 m3/day</td>
<td>354,500 m3/day</td>
</tr>
</tbody>
</table>

Source: PALLYA

*Source: KRuHA

Table 1. Comparison of service levels of PALLYA and AETRA in 2009
However, when the increase in the number of connections is investigated in more detail, the growth is not the same for all customer categories. Jakarta’s water tariff is divided into several groups, depending on the types of consumers and the sizes of the properties. For residential customers, those who stay in homes smaller than 28 square meters will be categorised as Category 2A1, which is the category for the urban poor. From the figures obtained from PALYJA and AETRA (see Figure 1), most of their customers are in K3A, which is the middle class.

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Dated : 15 January 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-10 m3</td>
</tr>
<tr>
<td>K1</td>
<td>Social Customers</td>
<td>1,050</td>
</tr>
<tr>
<td>K2</td>
<td>Low Income Domestic</td>
<td>1,050</td>
</tr>
<tr>
<td>K3A</td>
<td>Middle Class</td>
<td>3,650</td>
</tr>
<tr>
<td>K3B</td>
<td>Upper Class and small Business</td>
<td>4,900</td>
</tr>
<tr>
<td>K4A</td>
<td>Upper Class and small Business</td>
<td>6,825</td>
</tr>
<tr>
<td>K4B</td>
<td>Non Domestic</td>
<td>12,550</td>
</tr>
</tbody>
</table>

Table 2. Jakarta Water Tariff Structure (US$ 1 = Rp 9,000)
Water supply services in Metro Manila

The Metropolitan Waterworks and Sewerage System (MWSS) has been serving the City of Manila since 1878 and was the oldest water utility in Asia. However, until the 1990s when the services have expanded to cover the whole metropolitan area, MWSS' only covered up to two-thirds of the population on an average 16 hours per day and the level of non-revenue water hit a staggering 63% (Dumol, 2000). The ADB (2004) even noted that in 2004 only 53% of the population was connected. On 1 August 1997, MWSS formally entered a 25-year concession contract with two service providers, Manila Water on the East Zone and Maynilad on the West, after receiving four bids in January of the same year. Manila Water Company, Inc. (MWCI) was largely owned by Ayala Corporation and Maynilad Water Services, Inc. (MWSI) was owned by the Benpres Holdings of the Lopez Group of Companies (Luz & Paladio-Melosantos, 2009).

The award of the contracts was also inseparable from the fact that the two groups were powerful local business families in the Philippines (Argo & Laquian, 2004). Both groups maintained their hold of the companies at least until a decade after the agreement was signed. At that point, the difference between the East and the West Zones became very clear: the East Zone was faring much better than the West for two practical reasons. Firstly, the West Zone was grappling with the fact that there were many old pipes in the system, which made it difficult to trace leakages to cut down non-revenue water. Secondly, the Ayala group was primarily a real estate business venture, which could work in tandem with the expansion of water supply services. In 2008, MWCI was serving a population of 5.6 million, with 24 hour/day service, 99% coverage, and 20% non-revenue water (Aquino, 2008), while MWSI was still struggling with 68% non-revenue water in 2005 (Luz & Paladio-Melosantos, 2009).

In connecting the urban poor, MWCI has had the Tubig Para Sa Barangay program since 1998, which saw the amortisation of metering cost over 12 months period. The connections were largely set as master meter systems, in which community-based organisations were formed as the formal customers who collected the bill payments from the community to be paid to MWCI. From 1998 to 2008, the program has reached approximately 300,000 households.

Output-Based Aid (OBA)

With the focus on increasing access to basic services for the poor in developing countries, the output-based aid (OBA) approach becomes relevant to increase the access to water supply for the urban poor in Jakarta. Managed by the Global Partnership for Output-Based Aid (GPOBA), the OBA is funded until 2013 to design and implement sustainable basic services for the poor, encourage the adoption of OBA approaches, and identify the
OBA best practices. The GPOBA unit is administered by the World Bank’s Finance, Economics, and Urban Department.

Both concessionaires in Jakarta were required to reach 100 percent coverage at the end of the agreement in 2023. However, the fact that the planned investments in new connections would not be enough to reach the coverage target, the GPOBA became an alternative source of funds to expand their network coverage. PALYJA and AETRA approached GPOBA to implement an OBA approach in improving Jakarta’s poor communities’ access to piped water supply – both the formal and informal settlements.

The project would target low-income households that could not afford the initial connection, and the subsidy from OBA would be used to cover the connection fees. PALYJA and AETRA had to fully shoulder the investment costs to get reimbursed later upon the completion of the project and satisfactory evaluation of the service delivery for the first three months.

During the process of the OBA approach, AETRA dropped out from the program, for reasons that will be explained later in this paper. Hence, the final Operating Manual of the GPOBA for Water Supply in Jakarta cited only Western Jakarta and PALYJA as the only operator in the scheme.

Similarly, in Metro Manila, only MWCI entered the agreement with GPOBA to deliver water supply for the poor, which commenced in 2008. At that time, MWSI was in the process filing bankruptcy, which saw the foreign partner Suez Lyonnaise des Eaux as well as the Lopez Group leaving the company. The OBA subsidy in MWCI program would also come with 36 months installment scheme for meter and guarantee deposits to cover the remaining connection fee after the subsidy.

**OBA in Jakarta water supply**

The objective of the project, as stated in the Operating Manual, would be to “connect poor communities containing some 11,600 households in western Jakarta to the piped water distribution network.” The goals are stated as follows:

- Access to affordable and reliable clean water services;
- Health benefits from reduced exposure to environmental risks posed by unsafe water (reduced morbidity and mortality rates – especially in infants);
- Economic benefits from reduction in medical expenses to treat water borne diseases, increased productivity and capacity to work due to reduced morbidity and associated reduction in sickness related absence from work, reduced household expenditure of clean water (water tariff lower than cost of many alternative sources); and
- Social benefits from equitable access to clean water for informal/illega communities currently disbarred from access by DKI Jakarta spatial planning policy.

Out of the four objectives stated in the GPOBA Operating Manual, the actual benefit that the poor communities would enjoy most is the “reduced household expenditure of
clean water”. From the reliability point of view, BPP SPAM – a national-level water provision support body under the Ministry of Public Works – rated Jakarta as having ‘unreliable’ water service in 2006, 2007, and 2008. Among all, service disruptions and poor pressure are the most common problems.

Other than the fourth goal that specifically makes reference to DKI Jakarta’s spatial planning policy, the goals of the OBA Water Supply in Jakarta appear as general goals of water supply projects. While there are relevant points, there are unique water supply problems in Jakarta that have not been addressed in the goals. For example, water borne diseases in Jakarta were mostly caused by floods, clogged drains, unsanitary toilets and garbage disposal. While the quality of vended water cannot be verified, the water vendors who sell water at relatively exorbitant prices were also sourced from the water network. AETRA predicted that 70% of the non-revenue water is from illegal connection, which is also a source of water markets in urban poor communities.

While inarguably the OBA in water supply in Jakarta is beneficial for the urban poor, the rationale given to start the project is template-based and too general to describe the water problems of the urban poor in Jakarta.

**OBA in metro Manila water supply**

Similar to the project objective in Jakarta, the Metro Manila Water Supply GPOBA program stated it’s objective was “to increase access to piped water supply services for poor households in the east zone of Metro Manila thereby enhancing the welfare of those households” (GPOBA Grant Agreement, 2007).

The GPOBA in Metro Manila Water Supply for the East Zone is in a considerably much larger scale compared to the GPOBA in West Jakarta. Targeting 21,000 households, the GPOBA program carried out by MWCI has been built on the Tubig Para Sa Barangay (TPSB) water for the poor program that had been in place since 1998. Signed on 19 October 2007, the GPOBA allocated US$ 2.85 million to expand the program in 45 urban poor communities. “The GPOBA project builds on the successful track record of the TPSB program, as well as concerns identified in various independent evaluations conducted by the Asian Development Bank, the World Bank, and other organisations” (Menzies & Suardi, 2009).

Similar to the GPOBA for water supply in West Jakarta, the program in Metro Manila was based on the premise that the urban poor could not afford the connection fees, and the availability of piped water connection is going to significantly reduce the household

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8 Interview with AETRA officials, March 2011
expenses on water. MWCI combined geographic targeting and means-tested targeting to identify eligible beneficiaries. The communities have to be “officially certified as indigent by standardised means proxy tests indicating that a majority of households fall under the national poverty line” (Mummsen, Johannes, & Kumar, 2010), with approximate per capita income less than US$ 1 per day. This criteria is different from Jakarta that uses property size to determine eligibility, since it is entrenched in the tariff system.

**Private operators and responses to OBA**

An interview with an official in AETRA indicated that the major takeover of ownership from Thames Water to Acuatico in 2007 affected their ability to commit to the OBA expansion project. However, he also indicated at least two other reasons to drop out from the project. Firstly, the process was taking a considerably long time – they started the idea in 2005, but the project was finalised in November 2007. Secondly, the design of the program – in which the operator had to shoulder all the costs first to be reimbursed later after several months of project completion, and still subjected to evaluation of service delivery, was viewed as too risky for such investment. For example, in PALYJA’s case, the network expansion project was completed in mid-2009, but the reimbursement did not come until later in the year, and this was an expansion project that started at the end of 2007.

Thirdly, AETRA cited the tariff system as a reason of their hesitancy in proceeding in the OBA program. The beneficiaries of the OBA would have been the urban poor households. This means that all of them will belong to Category II in Jakarta's water tariff structure. With the cross-subsidy system that was embedded in the tariff system, the expansion of network targeting only the urban poor would mean that the expansion will skew the average tariff down, as the poor is paying a significantly lower tariff than the 'key accounts' who pays the premium tariff in Category 4 and above. Although the water operators would still be paid according to the volume of water they produce, AETRA saw this as potentially tipping the balance of their average tariff that would affect the escrow account. “We have to ensure that, for example, every time we connect ten poor families, we should have at least one key account to subsidise them.”

This view validates the Bakker et al.’s analysis (2007) that PAM Jaya’s rising block tariff structure “provided the water supply company with a strong disincentive to connect the poor.” However, the collected tariff is put into the escrow account, which will then be used to pay the operators on a flat water charge based on the amount of water produced. Therefore, the disincentives of the tariff structure for the operators were blocked by the differentiation between water tariff and water charge. The tariff structure certainly still affects the approach to connect the poor, because it encourages the shortfall in the account. But to proceed to expand connections to the poor will be more dependent on the approach that each operator adopts, rather than the tariff structure itself.
PALYJA’s official standing is that “socially and economically it is not good if the poor is not connected.”\(^9\) The operator claimed that they were discouraged to connect the poor because the poor created deficit in the escrow account. PALYJA called for a reintroduction of subsidy for the connection, i.e. the capital expenditure. “Even if you see developed countries now; like Paris for example, now we operate in full cost recovery, but it was not like that in the beginning! The government always subsidised the connections in the first place.” The GPOBA Water Supply project works well in this case, since the connection fee is mostly subsidised. The subsidiaries still pay for the connection, which was Rp 120,000 for the regular customers and Rp 12,000 for those in squatter settlements, but these numbers are way below the regular connection fees of Rp 600,000 per household for mass connections or Rp 1.8 million for individual connections.

Another contrast between the two Jakarta water operators in their views towards the OBA approach was their emphasis on their identities as foreign and local companies. Since the takeover from Thames Water in 2007, PT AETRA Air Jakarta is 95% owned by Acuatico, an Indonesian company based in Singapore. The company highlighted that having more local employees, especially in higher ranks after the takeover, affected their business practices\(^{10}\). They noted that currently they embrace a more ‘diplomatic’ approach in negotiations with PAM Jaya, which leads to their relatively higher understanding of the impact of the cross-subsidy tariff structure on the expansion that they can do while maintaining the ‘balance’ of the escrow account – the “joint account” that the water utility companies share with PAM Jaya, to which PALYJA and AETRA deposit the bill collection and obtain their water charges. In contrast, PALYJA’s reference to the ‘good practice’ in Paris resulted in a more aggressive approach in network expansion, but less consideration to the account shortfall.

This paper does not argue that being a foreign company makes PALYJA’s approach more progressive towards the poor, and thus took the OBA initiative. The experience from Metro Manila also shows that MWCI, which is local, signed an even larger grant for a wider GPOBA program. Rather, the tariff structure in Jakarta that seemingly subsidises the poor actually works against it, because the poor had been marginalised in getting water connections in the first place, either by their land tenure status or by their inability to afford the connection fee. The company that works diplomatically with the tariff structure would end up seemingly not progressive towards the poor, but tariff structure is at the heart of the obstacle for the poor in getting water connections.

In practice, the urban poor are more widely served by water connections after privatisation compared to before. As seen in PALYJA’s data, the largest increases in

\(^9\) Interview with Mr Phillippe Folliasson, President Director of PALYJA, July 2010

\(^{10}\) Interview with AETRA officials, March 2011
connections are in Category 2 and 3A, which represent the poor and the lower middle class. Apart from the debate whether the public or the private is more progressive, the network expansion to the poor is incentivised by the separation between the water tariff and the water charge. Meant to protect the private company’s interests, the flatwater charge economically translates the different customer categories into a homogeneous group, which potentially become incentives for the operators to treat every customer equally regardless of the categories.

**OBA and market expansion: Jakarta experience**

Apart from the social benefits of the OBA in Water Supply in Jakarta, the program expands the piped water supply market to urban poor communities that were identified as beneficiaries. Previously marginalised as groups who did not qualify for water connections – either by land tenure or by inability to afford the connection fee – the subsidy converted them to be new customers.

The GPOBA identified two types of service to the selected communities:

Type I connection, which refers to “standard metered household connection.” The connection fee will be Rp 120,000 for each household.

Type II connection: for “high density, very low income areas” with no legal land tenure. More popularly known as “master meter” system, the houses will have individual meters, but monthly bill will be based on the reading of the master meter and will be charged to the community-based organisation that would be formed to take responsibility of the bulk connection. The connection fee will be Rp 12,000 for each household.

The idea for the Type II connection is based on the situation in Jakarta’s spatial planning that disqualifies a house with no title to the land on which it is built from getting an individual connection. The logic for the disqualification is that an individual water connection will validate the existence of the house. However, the impact of that practice is that those with no legal land tenure will also be deprived of their right to access safe drinking water. Out of the ten areas selected for Phase I of the GPOBA Water Supply program, only one was planned for Type II connection, which was RT 16 RW 17 Muara Baru in Penjaringan, for 500 households.

<table>
<thead>
<tr>
<th>Kecamatan (Area)</th>
<th>Kelurahan (Sub-area)</th>
<th>Community (RW)</th>
<th>Approximate Number of Households</th>
<th>Actual Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penjaringan</td>
<td>Pejagalan</td>
<td>RW 15 – Gang Kantong</td>
<td>1,109</td>
<td></td>
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<tr>
<td>Kalideres</td>
<td>Kalideres</td>
<td>RW 10 – Gombol Paya; Kampung Rawalele</td>
<td>1,155</td>
<td>1,152</td>
</tr>
<tr>
<td>Community 1</td>
<td>Community 2</td>
<td>RW</td>
<td>Location</td>
<td>Population 1</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>----</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>Kalideres</td>
<td>Kalideres</td>
<td>06</td>
<td>Kampung</td>
<td>1,260</td>
</tr>
<tr>
<td>Kalideres</td>
<td>Pegadungan</td>
<td>11</td>
<td>Jl. Utan Jati</td>
<td>561</td>
</tr>
<tr>
<td>Kalideres</td>
<td>Tegal Alur</td>
<td>11</td>
<td>Jl. Permata – Jl. Pelopor; Jl. Menceng Raya</td>
<td>1,500</td>
</tr>
<tr>
<td>Kalideres</td>
<td>Kalideres</td>
<td>07</td>
<td>Jl. Benda 3; RW 01 – Jl. Daan Mogot Gang Madrasah</td>
<td>1,055</td>
</tr>
<tr>
<td>Cengkareng</td>
<td>Cengkareng Barat</td>
<td>07</td>
<td>Jl. Rawa Bengkel</td>
<td>841</td>
</tr>
<tr>
<td>Kebon Jeruk</td>
<td>Duri Kepa</td>
<td>08</td>
<td>Jl. Nusa Indah Gang A &amp; Gang E</td>
<td>400</td>
</tr>
<tr>
<td>Kalideres</td>
<td>Kalideres</td>
<td>06</td>
<td>Warung Gantung</td>
<td>1,549</td>
</tr>
<tr>
<td>Total</td>
<td>Potential Connections</td>
<td></td>
<td></td>
<td>9,430</td>
</tr>
</tbody>
</table>

Total number willing to connect (Type I), adjusted for 56.5% willing to connect, 10% up-take and 80% risk sharing threshold: 3,489

**TYPE II**

<table>
<thead>
<tr>
<th>Community 1</th>
<th>Community 2</th>
<th>RW</th>
<th>Location</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penjaringan</td>
<td>Penjaringan</td>
<td>16</td>
<td>RW 17 Muara Baru</td>
<td>500</td>
</tr>
</tbody>
</table>

Total number willing to connect (Type II), adjusted for 87% willing to connect, 10% up-take and 80% risk sharing threshold: 308

Table 3. Communities in Phase I of OBA and actual implementation (Sources: GPOBA Water Supply Western Jakarta – Expansion of Water Services Project Operational Manual, 2007 and PALYJA, 2011)
With the approximate number of households projected to be connected under the OBA program hovering at almost 10,000, the initial plan for the OBA program potentially added Category II customers of PALYJA by 10%. The second phase of the program planned for 1,700 more poor households to be connected, all using Type II connections.

<table>
<thead>
<tr>
<th>Kecamatan (Area)</th>
<th>Kelurahan (Sub-area)</th>
<th>Community (RW)</th>
<th>Approximate Number of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cengkareng</td>
<td>Kapuk</td>
<td>RW 05 – Gang Langgar 2 (RT 11, 12, 13, and 14) and Gang Taniwan (RT 6, 7 and 8)</td>
<td>400</td>
</tr>
<tr>
<td>Pademangan</td>
<td>Ancol</td>
<td>RW 05-Jl. Mangga Dua 8 (RT 11, 12 and 13)</td>
<td>300</td>
</tr>
<tr>
<td>Penjaringan</td>
<td>Penjaringan</td>
<td>RT 16 RW 17 Muara Baru (Areas not connected in Phase 1)</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>1,700</strong></td>
</tr>
</tbody>
</table>

Table 4. Communities in Phase 2 of OBA (Source: GPOBA Water Supply Western Jakarta – Expansion of Water Services Project Operational Manual, 2007)
The implementation of Phase 1 was completed in 2009 for a total of 5,042 connections. The number of connections was significantly below the approximate number of households, because not all households in those areas were willing to connect. Some did not qualify because they have previously had access to a water connection. The GPOBA water supply program was particular on the eligibility criteria:

It was the proposal for Type II connections that faced resistance from the community in Muara Baru. The World Bank cited the rejection by community members “in preference for standard, individual household metered connections” (Menzies & Setiono, 2010). In fact, the rejection was more complicated: the master meter approach was seen as an answer to getting around the legal issue: Those staying at homes with no land titles are not eligible to obtain individual water connections, but these communities are inarguably in need of affordable water supply.

Without piped water, the communities would be subjected to paying significantly more expensive prices for water. In Muara Baru, the area that was proposed for the Type II GPOBA water supply program, households typically pay Rp 1500 for two containers of 20 liters each, which means it is Rp 37,500 per cubic meter of water. In contrast, piped water only cost Rp 1,050 per cubic meter for poor households or Rp 3,550 per cubic meter for lower middle income households. Poor households in who are connected and consuming
up to 17 cubic meter of water would pay less than Rp 30,000 per month for water supply services.

The arrival of the GPOBA water supply program was economically beneficial for the urban poor, especially with the significant subsidy to cover the connection fees. However, master meter connection as outlined in Type II requires a strong community-based organisation to manage the community water bill. Currently, there are only two master meter systems in operation in Jakarta: one in Jembatan Besi for more than 90 households, and another in Rawa Bebek for approximately 51 households.

For these two communities, the benefits were good, but PALYJA also acknowledged that the achievements in the two communities in managing the bills were not the same. In Rawa Bebek, the CBO managed to come up with a system of a public notice board to publish the breakdown of the bills so that the community members could feel the transparency and felt obliged to fulfill their responsibility to pay. However, in Jembatan Besi the CBO struggled to pay the water bills because it is challenging to collect the money from each household.

The rejection from Muara Baru on the master meter scheme comes from a combination of reasons. The collective billing system and the complication of the CBO responsibility is one issue, but another is the entrenched ‘water mafia’ system that had operated in the area, which will be discussed later. A third issue is that in Muara Baru there was no NGO who facilitated the relationship between the community and PALYJA. In Rawa Bebek, Mercy Corps was closely facilitating the formation of the CBO to manage the water supply system. However, in Muara Baru, Mercy Corps’ involvement was only up to providing the report on community profile.

Separately, there had been several cases between communities in Muara Baru and PALYJA. During the World Water Day in 2010, about 40 people from Muara Baru protested at Bundaran Hotel Indonesia (HI) in Central Jakarta for not having running water for at least six years (Haryanto, 2010). These are existing customers who already had individual connections, but the water stopped running after 1997. The concurrence of the year when the water stopped and the year when water services were privatized built a perception among residents that privatisation brought service disruption. The Legal Aid Foundation assisted a legal suit in February 2010 but the lawsuit was called off (Haryanto, 2010).

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11 Interview with PALYJA representatives on the Master Meter program.

12 Interview with PALYJA representatives on GPOBA program.

13 Bundaran HI is a symbolic monument and the most popular protest space in Jakarta since the 1998 Reform.

14 Interviews with Muara Baru residents.
recent as the World Water Day on 22 March 2011, the same group came to Bundaran HI again to protest against water privatisation.

“I testified at the Supreme Court (against PALYJA)... I lost, I was defeated by the judge, but I won’t give up. I will fight until the last drop of blood. If I protest, the water flows. No protest, water off. If I was given water subsidy, I stay quiet, but if I don’t protest, no subsidy. How to make PALYJA not undermine me? Don’t undermine the poor, isn’t water a human right?” (Ibu Sumarti, Muara Baru resident, July 2010)

It took PALYJA more than one year of negotiations to proceed with connecting the distribution pipes in Muara Baru as part of the GPOBA water supply for Western Jakarta. They were in contact with the district head, who initially agreed to support the program. The district head suggested involving the religious leader of the ‘informal leader’ of those who benefit from selling water in the area. However, subsequently the district head retrieved his support, citing the reason that “this informal leader needed this income generated by water to survive and feed his family” (Fournier, Folliasson, Martin, & Arfiansyah, 2010). The support from the head of the police district also retracted his support after meeting the informal leader. PALYJA finally managed to break the deadlock by hiring the informal leader as PALYJA representative, and thus managed to add 132 connections to achieve the minimum target set in the GPOBA program.

“The area where we had chosen to implement the CBO, was one of the GPOBA area where the collection ratio was the lowest... it was a bit messy for a few months. So what we did is to improve the rooms for the meter reader. So that people walking in the area for PALYJA, in reading the meter. And it gives them a bit of time, a few months to really get used with the area, how to get there, how to find this particular house. Once we have improved this tune up, of the bills all the time.” (Mr. Vincent Fournier, PALYJA representative, July 2010)

Nevertheless, the GPOBA program was useful for the beneficiaries including those in Muara Baru. After the rejection of master meter system, they finally obtained individual connections, still at the largely subsidised connection fee of Rp 12,000 per household. PALYJA admitted that not all communities in Muara Baru could get uninterrupted water service, due to their low-lying location at the northern coastal tip of Jakarta. But those who received the services still benefit from it, and some of them who have relatives in other parts of Muara Baru that do not get the connection could also share the water with them.

**OBA and market expansion: Metro Manila experience**
GPOBA in Metro Manila also subsidises the fees for household water connection to the network. With no GPOBA subsidy, each household in Metro Manila has to pay PHP 7,531.73 (US$ 167).

<table>
<thead>
<tr>
<th></th>
<th>PHP</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter deposit</td>
<td>1,020.00</td>
<td>23</td>
</tr>
<tr>
<td>Guarantee deposit</td>
<td>600.00</td>
<td>13</td>
</tr>
<tr>
<td>Connection fee</td>
<td>5,911.73</td>
<td>131</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>PHP 7,531.73</strong></td>
<td><strong>US$ 167</strong></td>
</tr>
</tbody>
</table>

Based on household survey data and MWCI’s experience in its Tubig Para Sa Barangay program, the GPOBA program provided subsidy at PHP 5,911.73 (US$ 131) to cover the connection fee, and the households can pay the remaining deposits in installments for 36 months. In Jakarta case, the GPOBA subsidy was disbursed into the escrow account upon verification of three months’ satisfactory service delivery, while in Metro Manila the disbursement is made directly to MWCI.

The GPOBA program in Metro Manila was largely designed as master meter systems. Unlike the Type II connections in Muara Baru that got rejected by the community, the master meter systems in Metro Manila’s GPOBA program went considerably smoother. One major challenge that remains is the monthly billing collection, the collection of which from each member is the responsibility of the community leaders. In an interview, when asked about the main challenge after getting the water connection, a community leader expressed her concern: “Bill collection, definitely. It is difficult to get everyone to pay. [In a particular month] there is always someone who does not pay, and more than that, we need them to trust the numbers that we show them… which is often difficult.”

**Benefits: people and private sector**

Based on a preliminary survey for the GPOBA program, poor households without water connection in Jakarta used to consume 40-80 liters per day, which would add up to maximum 2.4 cubic meters per month. Under the GPOBA program, the GPOBA will only make full reimbursement to PALYJA when each household consume at least 10.8 cubic meters for three months, which means that each household is projected to consume at least 3.6 cubic meters of water every month, on a significantly lower rate. With the assumption that households spend Rp 1500 per 40 liters for water in containers, without GPOBA program they would have spent up to Rp 90,000 per month. With the water connection from GPOBA program, those in category 2A1 would only pay Rp 9,260 per month for 4 cubic meters and those in category 3A would pay Rp 24,640 per month.

Similar benefits are also felt by the communities under the TPSB program with MWCI. Compared with water vendors and even the small piped water network system, the TPSB program charges the community with the prevailing water tariff for the low-income
category. The price for vended water hovers at PHP 20-30 per drum (200 liters), which translates to PHP 100-130 per cubic meter. The price for piped water for low income households is PHP 8.52 per cubic meter, which is 12 times lower than the price from water vendors. Although in Metro Manila the output criteria is based on water pressure instead of minimum consumption, if households consume 30 cubic meters of water every month, the monthly bill would be PHP 162.00 instead of paying PHP 3000-3900 to water vendors.

![Bill collection ratio of the GPOBA beneficiaries](image)

**Figure 4.** Bill collection ratio of the GPOBA beneficiaries (Source: Fournier, Folliasson, Martin, & Arfiansyah, 2010)

For PALYJA, the benefit is that they were able to add more than 5000 connections to their network, which means the company would be able to: a) increase the volume of water sold, and b) reaching higher service coverage. Firstly, in increasing the volume of water sold, the GPOBA beneficiaries had always been potential markets that could not be reached because of financial and legal barriers for those without land titles. The GPOBA program's objectives is to deliver basic infrastructure services for the poor, but in practice it becomes a catalyst in expanding markets to potential consumers who would not otherwise subscribe to the service. Secondly, PALYJA is bound to the concession contract that outlined the target of 80% coverage in 2015 and 100% coverage in 2023. “PALYJA still needs more of these alternative funding [schemes] to reach service coverage of 80% by 2015” (Fournier, Folliasson, Martin, & Arfiansyah, 2010). With current service coverage of 63.9% for Western Jakarta, the target of achieving 80% in 2015 is challenging, especially with the limited supply of fresh water.

For MWCI, after one year, the GPOBA-supported Tubig Para Sa Barangay has reached 50.7% of the target, which means 10,642 connections for the urban poor. Firstly,

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15 Currently, Jakarta gets most of its water supply from Jatiluhur Dam in West Java, through the West Tarum Canal.
with billing collection rate hovering at 90-95%, it is clear that the GPOBA subsidy converted those in informal settlements to become customers of the water utility company. The scale of the TPSB program itself is now reaching 1.6 million people, which is more than 10% of the population of Metro Manila – a significant step towards fulfilling the targets outlined by the concession agreement. Secondly, the master meter system also reduces the rate of non-revenue water, because water loss after the bulk meter will be the responsibility of the community. This means that the community will bear the sense of ownership to maintain the network after the bulk meter and guard themselves, so that there would not be illegal connections to be shouldered by all community members.

**Compatibility between the market and the poor?**

In the cases of GPOBA in water supply schemes in Jakarta and Manila, the private sector and the poor who benefited from the program were compatible, because they both benefited from the arrangement. The urban poor households obviously benefit from the water connection: they received the subsidy for the connection fee and pay significantly less for water after they were connected. For the private sector, they get more paying customers on their way to reach the target as outlined in the concession agreement.

The aggressive expansion of services had never occurred before water supply services in Jakarta and Manila were privatised. The social and political arrangements in both cities were obstacles for the poor to get attention for water supply connection. Especially in Jakarta, the law prevented the water utility in providing direct connection to the informal settlers. The breakthrough of providing the informal settlers with direct water connections started first with the ambition to fulfill the concession contract, on which they are in serious need to obtain alternative funding for more capital expenditures to expand the network.

The achievement of the GPOBA-supported water supply programs in Jakarta and Manila, however, does not eradicate the contradiction between profit-making and market expansion with the welfare of the poor. The opening of access to water supply network for the poor was made possible by the GPOBA subsidy. However, the inaccessibility of the network to the urban poor itself was set by the political and economic conditions that favors the owners of capital than the proletariat. As outlined in the programs, the inaccessibility was due to the laws that prevent the connections and the connection fees – both of them are manifestations of legal, political, and economic discrimination towards the urban poor.

It was the effort of the actors within the water utility companies that led to the progressive approach of serving the urban poor that played the significant role in expanding the services, rather than a generalised compatibility between market expansion and pro-poor approach. The work of the PALYJA officials to approach the district head, the police, and the informal leader may be one that was spurred by the need to expand the
market, but the approach itself is the important pro-poor component. In practice, MWCI also works with the street leaders as their informants of any problems occurring in their communities’ water supply (Luz & Paladio-Melosantos, 2009). The nurturance of community-based organisations with helps of NGOs is also an important component in increasing the sense of ownership of the water supply network. These are efforts and approaches that are not exclusively market-oriented. Instead, they are community-oriented approaches that are applied in a market-driven setting.

One impact that may be more long-term from this process is the integration of the urban poor communities, including the informal settlers, into the market as consumers. The appointment of the informal leader in Muara Baru as PALYJA informant, for example, is also part of this integration process as a result of negotiation with communities that have structures that do not match the formal water market system. Community-based organisations are formed to manage the master meter systems in the Tubig Para Sa Barangay program in Metro Manila.

While this integration may be beneficial in increasing the communities’ sense of ownership on the water supply network, it also widens public acceptance of water supply services as commodities and buy-ins to the existing regulations and tariff structures. It would only be constructive for the communities when these organisations help to shape the civil society. The basic infrastructural benefits of the program would defeat its purpose when the communities become passive consumers or become divided on billing collection problems.

Conclusion

While inarguably the GPOBA program is beneficial for the poor communities that received the connection subsidies, it also integrates the communities into the water network to become customers of the expanded water market. The expansion of water network coverage to serve poor communities, who had been excluded for a long time because of discriminatory practices and legal conditions against them, is a progress to fulfilling their rights to water, since it gives them a more affordable access to water supply.

The question remains, however, whether the provision of services would give them incentives to voice challenges to the system that still work against them. The tariff setting in Jakarta, for example, although seemingly provide very cheap water for the poor, it discourages the service providers to treat them as important as the customers in ‘higher’ categories. Rather than questioning the tariff structure itself, it becomes an accepted fact that the poor are the ones that cause shortfall in the escrow account and the service to them need to be curbed to balance the cash flow. The abstraction of civil society members into numbers of categories and tariff structure has led to the normalisation of discriminatory practices.
From a distributional perspective, it is clear that the GPOBA program in water supply is a quick and straightforward answer to the water supply problem for the urban poor – although the private sector operators would argue that the process takes a long time. Nevertheless, it still has not addressed the very reason why the poor had been discriminated against, and thus integrate them into the structure that would still be discriminative. A just tariff structure and better subsidy system should be introduced to alleviate the long-term problems; otherwise the celebration of the GPOBA achievements would make it seem as if subsidising the connection fee and measuring the output are the answers to the water problems of the urban poor.

Bibliography


