Assessing the regulatory model for water supply in Jakarta

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ASSESSING THE REGULATORY MODEL FOR WATER SUPPLY IN JAKARTA

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SUMMARY

This article assesses the regulatory model for urban water supply services in Jakarta, the capital of Indonesia. Water supply services have been privately operated there since February 1998 after two companies—Thames PAM Jaya (TPJ), operating in Eastern Jakarta, and PAM Lyonnaise Jaya (PALYJA), operating in Western Jakarta—signed 25-years concession contracts with the state-owned Jakarta City Water Company (PAM Jaya). An independent regulatory body, the Jakarta Water Supply Regulatory Body (JWSRB) was established in 2001. The article compares the regulatory system in Jakarta with the French and English approaches to water regulation. It then assesses this regulatory system from the perspective of customers in order to assess how well customer protection, a central purpose of regulation, is being performed. The article concludes that although the essential regulatory mechanisms and activities are operating in Jakarta, the key regulatory role of customer protection is not being performed because customers do not perceive that they receive an acceptable level of water supply services. Copyright © 2008 John Wiley & Sons, Ltd.

KEY WORDS — concession; customer perception; regulation; urban water supply

INTRODUCTION

Strong regulation is necessary when there is private sector participation (PSP) in urban water supply. This is because the pipe network of an urban water supply system displays the classic features of natural monopoly, whereby it is less costly for a single provider to supply services. As a result, customers are unable to choose between competing water supply companies. In such circumstances, unless there is regulation, a private company would have the incentive to abuse its monopoly power and provide whatever service that it wanted at any price (Groom et al., 2006). Thus, regulation is necessary in order that the water tariff is set at a level that is affordable to customers and that the service quality is at an acceptable level. Price regulation is particularly important in developing countries where increases in water tariffs can make them less affordable to low-income citizens. However, it is also important that the tariff is set at a level at which the private company can make an acceptable return on capital whilst at the same time ensuring that it has sufficient funds to comply with the contractual obligation to extend services to the unconnected and to improve services to existing customers.

Brown et al. (2006) described the main purpose of regulation as ‘to protect consumers, including future consumers, and look after consumer interests in the short- and long term’ (p. 66). They argued that in order to achieve this purpose, regulatory agencies should adopt a consumer statement of rights. At a minimum, this should include three elements (i) quality-of-service standards that the consumers are entitled to expect, (ii) remedies to which the customer is entitled in case of breach, and (iii) access to the regulatory agency to seek redress of grievances (ibid.). Hence, in order to improve water services for poor households and communities, regulatory institutions have an important role to play in adapting the way in which the regulatory framework is implemented (Tremolet and Hunt, 2006).
REGULATORY FUNCTIONS

Regulatory rules are generally considered as mechanisms that facilitate the transition from a monopoly situation to a more competitive environment (Batley and Larbi, 2004; Defeuilley, 1999). In the natural monopoly context of urban water supply, the principal regulatory functions are economic, environmental, safety and customer protection, including social objectives.

Economic regulation consists of two key roles: to make changes in tariff levels and in service quality. Its purpose is to ensure that the water tariff is at a level that enables sustainable management of water utilities. At the same time, the tariff needs to be affordable to customers as well as to ensure that the service quality is at an acceptable level (ibid.; Groom et al., 2006; Tremolet and Hunt, 2006). Hence, Brown et al. (2006) recommend that there should be levels of maximum tariffs and of minimum service standards.

Environmental regulation comprises the regulation of water abstraction and water discharge. Such regulation is necessary to manage water resources in a sustainable manner (Tremolet and Hunt, 2006) because over abstraction of water resources and/or discharge of untreated sewerage could result in damage to the environment. Regulation in safety can be exemplified by drinking water standards, which ensure that piped water is safe enough to drink.

Customer protection is a central aspect of regulation, which is to assure that existing and future customers have an acceptable level of quality of their services, which is an element of economic regulation (Brown et al., 2006). Other elements of customer protection are to ensure that customers have access to the regulatory agency to seek redress for their grievances (ibid.). For example, it may be necessary to resolve customer complaints in the second instance after they have been dealt with inadequately by service providers (Tremolet and Hunt, 2006). In order to enforce customer protection, regulators may have the power to establish and enforce remedies (e.g. penalties) for breach of standards.

Achieving social objectives is a regulatory function that seeks to ensure that water is available in terms of accessibility and affordability to vulnerable groups, in particular low-income citizens (Groom et al., 2006). Expanding service coverage is a prime example of the social role of regulation. This is because private operators have less incentive to connect the unconnected, who are generally low-income citizens. These are less able to pay for the connection charge (including metre) and the average administrative costs to the operator of collecting payment are higher because their water bills are lower. Another social role of regulation is to design a step-tariff structure that incorporates an element of cross subsidisation between lower volume (poorer) households and higher volume (richer) households (Komives et al., 2005). However, in order to ensure that low-income citizens benefit from cross-subsidisation they need to be connected to the network in the first place.

DIFFERENT KINDS OF REGULATORY MODELS

The kind of regulatory functions required in the urban water supply sector differs according to the type of PSP arrangement (service contract, management contract, lease (aftermage) contract or concession contract) that is used. However, under all such arrangements, asset ownership remains with the public sector. The differences amongst them depend upon the extent to which the private operator assumes responsibility and risk in delivering the service. Divestiture is an arrangement under which asset ownership is transferred to the private operator through privatisation. Consequently, this arrangement requires a very strong regulatory system.

The French model of regulation

Under the French regulatory model, the water sector is regulated primarily at the municipal level. French municipalities are prohibited by law from selling their water and sanitation assets to private companies (Brown et al., 2006). Thus, divestiture is not an arrangement used in France. However, the municipality may delegate the responsibility(ies) of water supply services to private company(ies) for a certain period of time. Private operators are unable solely to pursue their own private interest, since they are constrained on the basis of what is stated in the contract signed with the municipality. This contract is legally enforced by the highest administrative court in
France, the Conseil d’Etat. This embodies several general legal doctrines under which the municipalities and companies are constrained (Brown et al., 2006).

The French institutional arrangement is an example of competition for the market since companies ‘compete at regular intervals for a time-bound contract which usually grants them exclusivity rights over an operating area’ (Water and Sanitation Program: WSP, 2002:25). The most common type of contract is the lease (affermage) arrangement (Geo economics, 2002). Many of the regulatory rules such as service standards are embodied in the contract and therefore, the French system is often referred to as ‘regulation by contract’ because there is no separate regulator and the contract itself is said to be the ‘regulator’ (Groom et al., 2006). In addition, because of this contractual relationship, there has to be agreement between both parties in order to alter the contractual terms with respect to matters such as service standards (ibid.). This is in contrast with the situation where water is provided directly by the municipality, where it possesses the sole authority to change them. There are separate bodies for other regulatory roles such as water quality (the Water Agency), environmental protection (Ministry of Environment) and river abstraction (River Basin Committees).

The English model of regulation

The institutional arrangement in England is divestiture (i.e. privatisation) whereby the private company owns the water assets as well as being responsible for operation, maintenance, new investment and commercial risk. Ten private companies own and operate water supply services in the form of geographical (regional) monopolies. These companies are legally empowered by license to provide the service within their areas (ABS Energy Research, 2004). At the time of water privatisation in 1989, an independent state-owned body, Office of Water Services (OFWAT) was established as the economic regulator. According to Brown et al. (2006), ‘independence’ means that ‘the regulator’s decisions are made without the prior approval of any other government entity, and no entity other than a court or a pre-established appellate panel can overrule the regulator’s decisions’ (p. 50). OFWAT regulates the water industry through a price cap tariff system and comparative competition whereby the regulator compares the performance of private operators using econometric techniques (Geo economics, 2002; WSP, 2002). It has the discretion to set tariffs and service standards and thus, unlike under the French arrangement, it can unilaterally change the tariffs and the service and technical standards in a manner that it judges to be reasonable (Groom et al., 2006). However, as in France there are separate bodies for other regulatory roles such as water quality (Drinking Water Inspectorate), environmental protection (Environmental Agency) and river abstraction (National Rivers Authority). Another stakeholder in the regulatory arrangement is the Consumer Council for Water (CCWater), an independent organisation representing the interests of customers for water and sewerage services. It focuses its attention on the level of customer bills, the services provided to customers and value for money as well as investigating complaints from customers about their water company.

Comparison of the French and English models of regulation

The fundamental difference between the two regulatory models is the existence of or not of an independent economic regulator. Brown et al. (2006) explain this in terms of whether or not there is a desire to depoliticise economic regulation. If there was no regulator under the divestiture arrangement in England, the private company would have the freedom to abuse its monopoly power. In contrast, the French approach of regulation by contract is explained by ‘the presumption that government cannot and should not be removed from the business of specifying public service obligations’ (ibid.: 341).

Another difference relates to how the regulatory rules can be modified (Groom et al., 2006; WSP, 2002). In France, the responsibilities are stipulated in the contract and therefore, in order to change these, there is the need for consent between the two parties. By contract, in England, the regulator has ‘the discretion to set tariff and service standards in what it judges to be the public interest’ (Brown et al., 2006; p. 35). However, because OFWAT has this authority to unilaterally change the regulatory rules, ‘water utilities claim that they have been unfairly affected by unilateral changes in policy’ (WSP, 2002: 24). This difference has implications for developing countries. If the regulatory principles are only defined in broad terms as in the English model, this would require a strong degree of mutual trust between the asset owner and the operator, something that is often said to be more problematic in such
countries (ibid.). Whilst, if the rules are overly prescriptive (as in the French model of regulation by contract), this may prevent the delivery of flexible services that are better suited to serving the needs of the poor (Groom et al., 2006).

In fact, most of the institutional arrangements with PSP in the urban water sector of developing countries embody a hybrid model under which the public sector asset owner develops the ‘regulatory deal’ in a contract (French approach) and then a separate, independent regulator is established (English approach) (Brown et al., 2006). There are two reasons why developing countries adopt this hybrid approach. First, most of these countries do not have a credible higher administrative court such as under the French regulatory system which could undertake dispute resolution. Second, give the unpredictable issues that arise from the need to rapidly expand the network to the unconnected; it is more difficult to incorporate in advance all the commercial and technical risks within the straight jacket of a contract.

THE JAKARTA WATER CONCESSION CONTRACT AND REGULATORY SYSTEM

Water supply services in Jakarta have long been characterised by poor performance, as indicated by low service coverage and high losses from non-revenue water (NRW). The service coverage ratio was a mere 23% in 1989 and the NRW rate was 51% (JBIC, 2001). During the 1990s PSP was encouraged in order to break the vicious cycle of high costs, low investment and poor performance. In June 1997, the state-owned Jakarta City Water Company (PAM Jaya) signed two separate 25-year concession contracts with PT Kekar Thames Airindo (KTA) and PT Garuda Dipta Semesta (GDS). Under this arrangement, the city was divided into two ‘service areas’, each having three ‘service zones’: service zones 2, 3 and 6 (KTA) and service zones 1, 4 and 5 (GDS) (Figure 1). At the commencement of the contracts on 1 February 1998 the assets of PAM Jaya (e.g. water treatment plants, water network, equipment, offices and inventories) were transferred to the custody of the private operators and will be returned to PAM Jaya at the end of the concession period on 1 February 2023 (PALYJA, 2005). By this time, the population of Jakarta was 9.3 m, the service coverage ratio was still only 43%, and the NRW rate had risen to 58.5% (JWSRB, 2007).

Following the 1998 overthrow of President Suharto in the aftermath of the East Asian Crisis, this original contract was renegotiated. The major currency devaluation had hindered the implementation of the agreed investment plans because the companies depended on foreign loans to finance investment. The renegotiated contract, known as the Restated Cooperation Agreement (RCA) was signed on 22 October 2001 between PAM Jaya and the private consortia, which had changed their names respectively from KTA to PT Thames PAM Jaya (TPJ)
and from GDS to PT PAM Lyonnaise Jaya (PALLYJA). As a result, the five service standards and five technical targets that are monitored in the contract were reset, as shown in Table 1.

The RCA also stipulated the need for an independent regulatory body. Hence it was only at this moment—and not at the commencement of the contracts in 1997—that such a body, Badan Regulator Pelayanan Air Minum DKI Jakarta (BR PAM DKI); henceforth, Jakarta Water Supply Regulator Body (JWSRB), was established by a decree of the Governor of Jakarta on 1 November 2001. Its terms of reference were ‘to protect the interest of the consumers and also the interest of the Parties in the RCA between PAM Jaya and the two concessionaires (PAM Jaya and PALLYJA, 2001:1, PAM Jaya and TPJ, 2001:1).

The main roles of JWSRB are to review tariffs and make proposals to the Governor, to monitor the performance of the companies and to mediate disputes between the contractual parties and customers (Box 1).

**Box 1. The roles of JWSRB**

- Arranging coordination among the relevant government authorities agencies in relation to the implementation of this agreement
- Monitoring enforcement of deep well closure
- Monitoring tariff rates in each tariff band and estimating average tariffs for all customers and subsidies customers
- Mediating and disagreement or dispute between PAM Jaya and the companies in the implementation of this agreement

To the customers
- Monitoring the provision of water to customers
- Developing and establishing clear and equitable mechanisms for settlement of disputes with customers with respect to the provision of customer services

To the companies (TPJ and PALLYJA)
- Monitoring of the implementation of the cooperation agreement

To PAM Jaya
- Monitoring the performance of PAM Jaya’s rights with respect to design and construction under this agreement


Although Box 1 suggests that JWSRB has many roles, in reality its freedom of action is severely constrained in three ways. First, it has no legal authority to change the ten contractual performance indicators (i.e. five service standards and five technical indicators) referred to in Table 1. Second, although it can act as an arbitrator, the dispute

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Table 1. Performance indicators of the Jakarta concession contract

<table>
<thead>
<tr>
<th>Technical targets</th>
<th>Service standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of water billed (sold)</td>
<td>Water quality*</td>
</tr>
<tr>
<td>Water production from water treatment plant</td>
<td>Water pressure at the consumer’s tap</td>
</tr>
<tr>
<td>NRW (non-revenue water)</td>
<td>Customer care†</td>
</tr>
<tr>
<td>Number of connections</td>
<td>Routine interruption in distribution network†</td>
</tr>
<tr>
<td>Service coverage ratio</td>
<td>Time for installing new connection</td>
</tr>
</tbody>
</table>


*Needs to be compliant with the Clean water standards and Portable water standards.*

†For example, response time to routine telephone calls.

‡This refers to the response time when there is an interruption to tertiary, secondary and primary pipelines.
resolution mechanism to be followed, as set out in the contract, is unclear (PAM Jaya and PALYJA, 2001; PAM Jaya and TPJ, 2001). Third, and most importantly, changes in the tariff level require the approval of the Governor of Jakarta. Thus, although the JWSRB may recommend an appropriate tariff level, this is of no consequence unless the Governor approves it. The power of JWSRB with regard to economic regulation is limited to the implementation of the Automatic Tariff Adjustment (ATA), a system for inflation indexing of the water tariff. On the basis of the inflation rate JWSRB proposes a revision of the water tariff to the Governor every six months for each customer category. In Jakarta, customers are divided into seven categories, broadly according to economic size. Each household falls into one of six of these categories, differentiated by size, as measured in square metres.

ANALYSIS OF THE JAKARTA REGULATORY MODEL

The institutional arrangement of the regulatory system for the Jakarta urban water supply system is a ‘hybrid’ model. One the one hand, PSP takes the form of a concession contract and hence embodies the French model of regulation by contract. On the other hand, there is also an independent economic regulator, as found in the English model. A comparison of the Jakarta model with the English and French models is shown in Table 2.

The Jakarta model differs from the French model with regard to who performs the major aspects of economic regulation. Under the French model tariff-setting is carried out exclusively by the municipality but making changes in service standards and technical standards depends on agreement between the municipality and the private operator. In the Jakarta model tariff-setting is carried out by two stakeholders: the Governor of Jakarta and JWSRB. Similarly, changes in service standards and technical standards depend on agreement between the asset owner and operators. Under the English model, OFWAT performs all aspects of economic regulation. Thus, it can be said that the power to change rules differs amongst the three models. Under the English model, OFWAT can make and impose changes unilaterally for both tariff-setting and changing service and technical standards. Under the French model the municipality can make and impose changes in tariff unilaterally but requires agreement between the municipality and the operator for making changes in service and technical standards. By contrast under the Jakarta

<table>
<thead>
<tr>
<th>Economic Regulator</th>
<th>English model</th>
<th>French model</th>
<th>Jakarta model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set tariff</td>
<td>Regulator</td>
<td>Municipality</td>
<td>Governor of Jakarta</td>
</tr>
<tr>
<td>Change tariff</td>
<td>Regulator</td>
<td>Municipality</td>
<td>Governor of Jakarta</td>
</tr>
<tr>
<td>Set service and technical standards</td>
<td>Regulator</td>
<td>Embedded in the contract/ Agreement between the Municipality and the operator</td>
<td>Negotiation between PAM Jaya and the operator</td>
</tr>
<tr>
<td>Monitor service and technical standards</td>
<td>Regulator</td>
<td>Municipality</td>
<td>JWSRB</td>
</tr>
<tr>
<td>Change service and technical standards</td>
<td>Regulator</td>
<td>Agreement between the Municipality and the operator</td>
<td>Negotiation between the PAM Jaya and the operator</td>
</tr>
<tr>
<td>Dispute resolution</td>
<td>Government established regulatory body</td>
<td>Court, arbitration</td>
<td>Embedded in the contract/JWSRB</td>
</tr>
<tr>
<td>Water Quality</td>
<td>Drinking Water Inspectorate</td>
<td>Ministry of Environment</td>
<td>Ministry of Health and JWSRB</td>
</tr>
<tr>
<td>Environmental Regulation System for channelling customer voice</td>
<td>Environment Agency Customer Service Committee</td>
<td>Ministry of Environment Water Parliament</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Source: Developed by the authors on the basis of Groom et al. (2006), WSP (2002) and PAM Jaya and PALYJA (2001), PAM Jaya and TPJ (2001).
model, this cannot be done since there is a need for agreement between two parties: the Governor of Jakarta and JWSRB in the case of tariff setting and PAM Jaya and PALYJA/TPJ in the case of service and technical standards.

In the case of water quality, both the French and English models have separate regulatory bodies, respectively the Ministry of Environment and the Drinking Water Inspectorate, while in the Jakarta model this is the responsibility of the economic regulator, JWSRB. Environmental protection is also the responsibility of separate regulatory bodies, the Ministry of Environment in the French model and the Environmental Agency in the English model. However, in the Jakarta model, it is not possible to identify any institution that performs the role of environmental protection.

All three models have a system for channelling customer voice. The difference is that whereas there is one such body for channelling customer voice in England and France, in the Jakarta model there are two bodies, namely FKPM and KPAM. The Consumer and Public Communication Forum: Water voice system (FKPM) is a customer committee established on 17 January 2002 by a decree of the Governor of Jakarta (JWSRB, 2002). It meets every three months and comprises various stakeholders such as customers, PALYJA/TPJ, PAM Jaya and other related government organisations and academic institutions at the Jakarta city level. A Water Consumer Committee (KPAM) operates in each of the five municipalities that comprise the city of Jakarta. The five KPAMs were inaugurated and their articles of agreement signed in the respective municipal offices between February and March 2003 (JWSRB, 2005). It is understood that KPAMs were established because of a ‘need to establish a forum at grass root level which can voice consumers’ complaints in a more elaborate way’ (JWSRB, 2002:8).

Table 2 shows that there are fewer stakeholders involved in the English and French regulatory models compared to that of Jakarta. This implies that there is less need for developing a consensus amongst stakeholders in carrying out regulatory activities under the English and French system than in the case in Jakarta. The time and effort required to achieve a multi stakeholder consensus in carrying out regulation is likely to be a constraint for effective regulation.

Two researchers have proposed a checklist in order to assess the impact of water regulation on poor citizens in particular (Tremolet and Hunt, 2006). This seeks to identify which body carries out four basic functions of economic regulation (i.e. price regulation, service quality regulation, competition regulation and customer protection) that affect five types of service provider (i.e. main operators, operators of small networks with bulk water supply contact, operators of small independent networks, standpipe operators with bulk supply, and private water vendors (PWVs).

Following this checklist in the Jakarta model, JWSRB is the formally the regulator for the main operators (i.e. PALYJA and TPJ). Price regulation is carried out by the regulator and by the Governor of Jakarta. The regulator proposes the water tariff but the Governor retains the authority to change and enforce tariffs. Service quality regulation is carried out on a tri-partite basis. The regulator monitors service quality and PAM Jaya has the authority to set and change standards in consultation with the operators (i.e. PALYJA and TPJ) and to enforce them. Competition regulation seeks to monitor the market (in the case of a monopoly provider) by promoting competition where applicable. However, this aspect of regulation has been ignored in the case of Jakarta. This is because JWSRB was established solely to regulate the PSP contracts between PAM Jaya and PALYJA/TPJ and there is no regulatory role with regard to the sinking of private boreholes, the operation of private tankers and the resale of water by PWVs. Finally, customer protection is carried out by the regulator since the two kinds of water customer committees both report to JWSRB.

Tremolet and Hunt (2006) also identify seven regulatory activities (i.e. regulatory knowledge of poverty issues, listening to the customer, regulation of the main provider or providers, regulation of alternative providers, coverage regulation, tariff setting and quality standards) that may be used in order to evaluate whether a regulatory framework addresses the needs of poor households. Table 3 shows which body is responsible for each of these activities in the case of Jakarta as well as stating what is actually carried out in each case. It confirms that the regulator plays a role in all of these activities except for the regulation of alternative providers (i.e. PWVs). This is an important omission because in Jakarta, as in other large cities in developing countries, it is precisely the poorest urban households who are least likely to be connected to the network, and hence, dependent on purchasing water from PWVs, at a price that is significantly higher than that paid by those citizens who are connected to the network (Nickson and Franceys, 2003; Weitz and Franceys, 2002).
CUSTOMER PERCEPTION OF WATER SUPPLY SERVICES

Customer protection is a central purpose of water regulation; to assure that existing and future customers have an acceptable level of quality of their services. As shown above, within the Jakarta water regulatory model this is formally the responsibility of the regulator, JWSRB. However, there remains the important question of effectiveness in the performance of this role. This was examined by obtaining customer perceptions of water supply services. The objective was to see whether the role of customer protection is being performed to an extent that customers perceived as acceptable. Six focus groups (i.e. one focus group for each of the service zones shown in Figure 1) were convened during June–August 2006. This ensured that the citywide views expressed would be representative of both service areas (i.e. TPJ and PALYJA) as well as the three service zones in each service area. The 35 respondents in the focus groups were all poor women in the K2 customer tariff band, which is the lowest customer band for household users. Women were chosen as respondents because they are more engaged than men in the various household chores that use water.

Respondents were not satisfied with the piped water service in two respects. First, the supply was intermittent. Second, the water quality was low with regard to smell (chlorine), colour (yellowish) and taste (salty). However, respondents said that quality and price was not a major concern so long as water continued to flow from the tap. In fact, respondents in five out of the six focus groups highlighted water continuity as the most important aspect of service performance, as shown in Table 4. One of the most common complaints expressed was that they had to stay up late at night to obtain water. For example, many respondents stated that they need to get up at 2 am for about 2–3 h so that they can store water to be able to use it during the day, when tap water is rarely available. Household coping strategies to deal with the intermittent supply included storing the water so that they could use it during the day, using wells and buying water from PWVs. Respondents often stated said that they would not mind paying more for water as long as they received it. As one respondent put it, ‘Why do we have to pay for what we do not get?’

Table 3. Regulatory activities carried out in Jakarta

<table>
<thead>
<tr>
<th>Regulatory activities</th>
<th>Is this activity carried out? By whom?</th>
<th>How is this activity carried out?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulator’s knowledge of poverty issues</td>
<td>Yes regulator</td>
<td>Organise FKPM and KPAM Findings of annual customer satisfaction survey</td>
</tr>
<tr>
<td>Listening to the customer</td>
<td>Yes regulator and companies (PALLYA/TPJ)</td>
<td>Act as an appeal mechanism to resolve consumer complaints against the operator (by JWSRB). Attend FKPM and KPAM (by PALLYA/TPJ and JWSRB). Carry out annual customer satisfaction survey (by PALLYA/TPJ). Requirement for customer complaints system (telephone call centre) (by PALLYA/TPJ)</td>
</tr>
<tr>
<td>Regulation of the main provider or providers</td>
<td>Yes regulator</td>
<td>Monitoring performance and enforcing penalties</td>
</tr>
<tr>
<td>Regulation of alternative providers</td>
<td>No</td>
<td>The regulatory powers of JWSRB are restricted to the activities of the operators (PALLYA and TPJ) Service coverage is one of the monitored indicators but this can only be altered by agreement between PAM Jaya and the operators</td>
</tr>
<tr>
<td>Coverage regulation</td>
<td>Yes regulator, PAM Jaya and companies</td>
<td>The regulator only has a role in proposing tariff changes. The Governor of Jakarta takes the decision As with Coverage regulation. But drinking water quality standards are set by the Ministry of Health</td>
</tr>
<tr>
<td>Tariff setting</td>
<td>Yes Governor of Jakarta</td>
<td></td>
</tr>
<tr>
<td>Quality standard</td>
<td>Yes regulator, PAM Jaya and companies</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed by the authors on the basis of Tremolet and Hunt (2006).
CONCLUSION

This analysis of the regulatory model for the Jakarta water supply system leads to two major conclusions. The first is that there are more stakeholders responsible for the various aspects of regulation in the case of Jakarta than under the English and French regulatory models. The second is that although JWSRB has many formal roles, in practice its ability to enforce change with regard to service delivery is limited. The most striking example of this is that it has no authority to change the water tariff or service quality standards. Bearing this in mind and the fact that low-income customers simply do not feel that they are receiving an acceptable level of water supply services, three conclusions can be drawn. First, customer protection, which is a central purpose of regulation, is not being performed in practice. A second and related conclusion is that JWSRB, despite its wide-ranging regulatory powers, is not effective in improving service to customers. Its ineffectiveness is highlighted by the fact that although water continuity was the most commonly expressed aspect of performance that customers valued, it is not one of contractually monitored indicators (see Table 1). This leads to a third conclusion, namely that customers’ voices (i.e. FKPM and KPAM) are not influential on the behaviour of any of the bodies (i.e. PAM Jaya and PALYJA/TPJ) that are responsible for the content, monitoring, enforcement and operation of the contracts. Unlike the case of CCWater in the English model, they do not seem to have exercised any significant ‘voice’ in influencing the regulator to improve services in the direction of greater ‘consumer protection’.

In sum, this analysis of the Jakarta regulatory model indicates that despite the formal existence of regulatory roles and activities, JWSRB has failed to exercise these roles in a manner that is perceived by the urban poor as improving the performance of the water services that they receive.

REFERENCES


Table 4. Summary of findings of focus group discussions

<table>
<thead>
<tr>
<th>Focus group discussion (FGD)</th>
<th>What is the most important aspect?</th>
<th>Why do they think so?</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGD 1 (North/TPJ)</td>
<td>The continuity of water</td>
<td>They cannot use the water when they want to as it is mainly only available during the night (2–4 am)</td>
</tr>
<tr>
<td>FGD 2 (Central/TPJ)</td>
<td>The price of water</td>
<td>It is too expensive and the price that they have to pay is always increasing</td>
</tr>
<tr>
<td>FGD 3 (East/TPJ)</td>
<td>The continuity of clean water</td>
<td>They are not sure whether it is hygienic and thus have to boil the water before drinking</td>
</tr>
<tr>
<td>FGD 4 (Central/PALYJA)</td>
<td>The continuity of water</td>
<td>They often have to stay up late to wait for the water supply. And they have to pay a high price for water</td>
</tr>
<tr>
<td>FGD 5 (West/PALYJA)</td>
<td>The continuity of water</td>
<td>They depend exclusively on tap water and do not have any other sources</td>
</tr>
<tr>
<td>FGD 6 (South/PALYJA)</td>
<td>The continuity of water</td>
<td>They resent having to pay more for water although the supply is intermittent</td>
</tr>
</tbody>
</table>

Source: Derived from analysis of fieldwork notes from focus group discussions.


