

CURRENT SITUATION OF JAKARTA WATER PRIVATIZATION

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I. History of Water Privatization in Jakarta

From the historical point of view, the provision of clean water for Jakarta has been conducted since 1843. Initially, the provision of clean water in Jakarta was the task of Ministry of Public Works. It was only in 1977, pursuant to Regional Government Regulation No.3 of year 1977, PDAM Jakarta separated itself and was reestablished as PAM Jaya². The endeavor to improve the provision of water for the residence of Jakarta has long been done. In 1953, the Government built the Pejompongan I Water Treatment Plan (WTP) with the capacity of 2000 l/second and in 1964 the Government built WTP Pejompongan II with the capacity of 3000 l/second. On the 1980-1990 decade, PAM Jaya built WTP Pulogadung with the capacity of 4000 l/second and WTP Buaran with the capacity of 5000 l/second.

Along with the increasing number of the population and the urbanization flow, clean water has become one of the problems encountered by Jakarta. Various problems concerning clean water among others are: no access to clean water for many people, extreme exploitation of land water by the people, industrial sectors, and other commercial business. On the other hand, the service provided by PAM Jaya as a utility responsible to provide clean water, is far from satisfactory. PAM Jaya's inability to cope with the clean water provision problem in Jakarta is feared to disrupt the effort of the Indonesian Government to encourage economic development and to increase income per capita of the of the people as stated in its long-term development plan.

Based on the abovementioned conditions, the involvement of the private sector in providing clean water is a significant part of the effort done by the Regional Government of Jakarta to solve the said problems. The attempt to involve the private sector in the provision of clean water in Jakarta has been done since 1992, whereas there are three private corporation interested in cooperating with PAM Jaya. However, the attempt failed due to no agreement was reached between the Regional Government of Jakarta and the private corporations particularly concerning the compensation given by the government to the private sectors if the volume of water sold does not meet the target and also concerning the tariff raise issue..

Based on the "president's instruction", in 1995, the clean water provision system is divided according to the Ciliwung river splitting Jakarta into two region. Afterwards, The Department of Public Works divides Jakarta into two concession area, one of which is on the west side of the Ciliwung River and the other one is on the east side. Two private consortium, Thames Water International which form a partnership with local company, Kekarpola Airindo, was assigned to operate the east side of Jakarta and Suez-Lyonnaise des Eaux with its local partner, Garuda Dipta Semesta, was assigned to manage the west part of Jakarta. The Memorandum of Understanding (MoU) of this project was executed on October 6, 1995 where

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² PAM Jaya is Jakarta Water Public Utilities

both consortium was required to prepare a feasibility study which should be finished 4 months after the MoU agreement. The final agreement and contract was signed on June 6, 1997 and would be effective on February 1, 1998³. The legal reference served as the basis of the partnership is Minister of Domestic Affairs Regulation No.4 of 1990 concerning Guidelines on Partnership of Regional Company and Private Sector, Minister of Domestic Affairs Instruction No.9 of 1995 concerning Guidelines of Partnership Implementation Methods of Regional Company and Private Sector, and Minister of Domestic Affairs Instruction No.21 of 1996 concerning Guidelines of Partnership of Implementation Regional Water Company and Private Sector.



Figure 1. Map of Clean Water Cooperation Area Distribution in Jakarta

2. Allocation of Risk and Liability of Water Privatization in Jakarta

In a partnership between the private sectors and the government or public utility, allocation of risk and liability is a significant matter to be negotiated. The Allocation of risk and liability between PAM Jaya and its private partners (PT. Palya and PT. TPJ) will be explained on tabel 1 below.

³ The agreed partnership model is a concession contract for a period of 25 years

Table I

Allocation of Risk and Liability between Private Partners and PAM Jaya

Private Partners	PAM Jaya
The achievement of technical Target and Service Standard	Monitoring on technical target and service standard
The next 5 years investment plan	Evaluating on feasibility study and assisting the next phase renegotiation
Financing	Financing Monitoring
Implementation	Implementating Monitoring
Operation and Maintenance	Operation and Maintenance Monitoring
Information to tariff committee	Tariff Adjustment
Bad Debt	Raw Water/Bulk Water
	Deep Well

3. Revenue Sharing Mechanism

Another thing requiring attention in the partnership between PAM Jaya and PT. Palyja and PT. TPJ is the imposition of water charge. Water charge is a price determined by the two private operators of every m³ of the water produced air yang diproduksi. In addition to water charge, water tariff is also imposed. Water tariff is the price of every m³ of water which should be paid by the consument. The said water charge is collected in an Escrow Account. Figure 2 below illustrates the mechanism of revenue sharing of the partnership between PAM Jaya and its Private Partners.

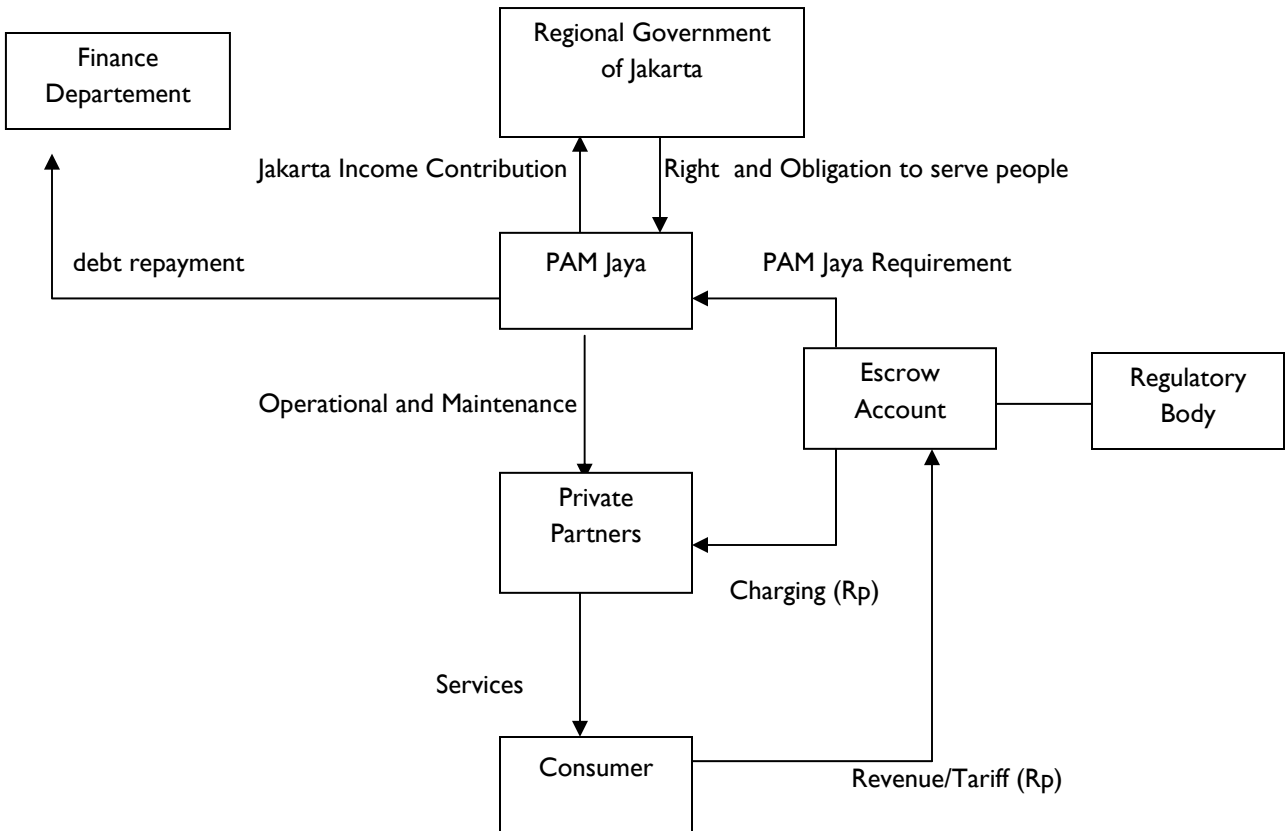


Figure 2
Revenue Sharing Mechanism

4. Technical Target, Standard of Service, and Investment

The joining of the private operators is expected to improve the standard of service through raising the bar of the technical target which should be achieved and investment program which will be performed by the private operators. The technical targets which should be achieved and the investment program which should be performed will be explained on table 2 and 3 below .

Table 2
Technical Target of the Partnership between PAM Jaya and its Private Partners

	Year 5	Year 10	Year 20	Year 25
Volume of water sold	342 million m3	398 million m3	419 million m3	428 million m3
Leakage Rate	35%	25%	20%	20%
Coverage of Service	70%	75%	98%	100%
Water quality	-	Clean Water at the end of year 9	Potable Water	Potable Water
Water pressure	7,5 m on each zone except for Pluit	7,5 m on each zone except for Pluit	7,5 m on each zone	7,5 m on each zone

Table 3
Investment Program for the First 5 Years

Description	West Jakarta	East Jakarta	Total (Milyar Rupiah)
Production	146	30	176
Transmission	138	0	138
Distribution	390	361	751
Losses (UfW)	165	96	261
Others	85	109	194
Total	924	596	1520

Specifically, the technical targets expected to be achieved from each zone of concession contract is specified on table 4 and 5 below.

Table 4
Technical Targets (Western Area)

Technical Targets	Year 1	Year 2	Year 3	Year 4	Year 5	Year 25
Volume of water sold (million m3)	89,17	101,73	110,41	114,55	118,73	169,78
Water Production (lt/sec)	5213	5077	4663	4873	5100	5900
UfW (%)	58,63	57,84	51,27	49,27	47,27	27,22
Number of connection (Unit)	209.895	225.813	257.952	282.048	301.048	450.198
Coverage of Service (%)	32	33	38	42	45	100

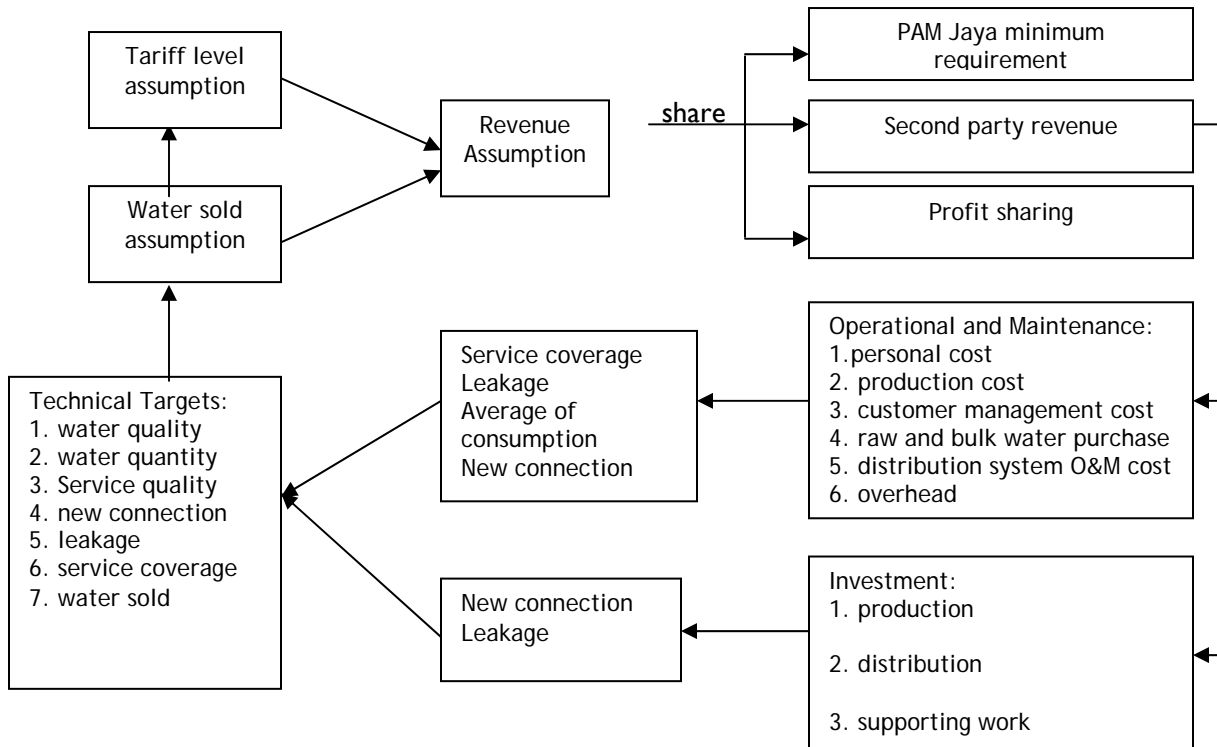
Table 5
Technical Target (Eastern Area)

Technical Targets	Year 1	Year 2	Year 3	Year 4	Year 5	Year 25
Volume of water sold (million m3)	91,96	105,90	117,94	121,83	131,32	183,50
Water Production (lt/sec)	8.523	7.827	7.408	7.282	7.309	7.758
UfW (%)	58,07	51,74	45,74	45,03	43,03	25,00
Number of connection (Unit)	278.083	285.735	304.303	315.126	335.413	430.813
Coverage of Service (%)	57	57	59	60	62	100

The connection of tariff, water charge and technical target will be explained further on figure 3 below

Figure 3

The Connection of Water Charge, Water Tariff and Technical Targets



The economic crisis experienced by Indonesia, causing the partnership between the Regional Government of Jakarta and both consortium to face an obstacle, therefore both parties agreed to renegotiate the contract signed previously. The new cooperation agreement was signed on October 22, 2001, which was known as *Restated Cooperations Agreements (RCA)*. One of the provisions of this agreement is the imposition of “transition” period effective since the execution of the contract up to the end of the year. The “transition” period is an agreement concerning real and reasonable *operational expenditure (OPEX)* used to determine new *water charge* per early 2003. In addition to OPEX, the new prevailing agreement is the establishment of Regulatory Body, which function is to protect the consumers’ interest and also to protect the interest of the parties in the agreement between PAM Jaya with the two private operators.

Since RCA was signed, there are several new developments related to the agreement contract between PAM Jaya and the two private operators. The developments are specified in the table 2 below

Table 2

Development Related to the Agreement Between PAM Jaya with Private Operators (Palyja and TPJ)

No	Point	Information
1	Water Charge dan Water Tariff	<ul style="list-style-type: none"> • <i>Water charge</i> is the burden per m3 of water which should be paid by PAM Jaya of the investment and the service provided by the private operators, whereas <i>water tariff</i> is the price of water per m3 which should be paid by the consumer • Water charge is calculated based on the financial projection of the second party up to the completion of the contract period with the Internal Rate of Return (IRR) of 22%. Water charge is also indexed each semester according to the applicable inflation rate
2	Rate Rebasing	<ul style="list-style-type: none"> • Every five years the parties should evaluate the investment program implementation and operation and also the maintenance which has been performed the last five years. The parties should also prepare the same program for the next 5 years. Based on the RCA, rebasing should be finished on December 31 and January 1 2003 by using new water charge in starting the 2003-2007 period.. • This rebasing negotiation process was not finished on time, hence deviates from the set target.
3	Automatic Rate Adjustment (PTO) *	<ul style="list-style-type: none"> • On October 24, The Government of Jakarta Capital Territory established a policy concerning Automatic Tariff Adjustment. With the formula $\text{Tariff} = C_n + K (\text{PAM} + \text{Depkeu} + \text{PAD} + \text{BR}) + R$, where: C_n = Water charge semester n K = FPPR (First Party Primary Requirement): PAM Jaya requirement,, Regulatory Body, debt and PAD R = Reserved Account for the allocation of shortfall installment <p>* The objectives of the PTO is to keep the agreement from experiencing deficit and reduce tariff increase which for the consumer which is too high.</p> <p>* The first PTO was effective on the first semester of 2005 and the second PTO was effective on the second semester of 2005. The third PTO was supposedly be effective on the first semester of 2006, however, due to the pressure from the public and the failure of the private sectors to submit the working report on time, the third PTO was postponed.</p>
4	Issuance of Palyja Bonds	On 2005, Palyja issued bonds which are registered in Surabaya Stock Exchange. The total bonds offered is Rp 650 billion. The objectives of the issuance of the bond was to settle a short term debt to Caylon Merchant Bank Asia amounting of Rp.341,8 milyar and European Investment Bank amounting Rp 178 milyar. In addition to that, the bonds, amounting of Rp. 107,2 billion, was used to fund an investment and another Rp 5,8 billion is used for working capital.
5	Global Partnership Output Based Aid	To improve the service for the underprivileged people, The World Bank provides a grant in the amount of USD 5 million through the Output Based Aid (OBA) mechanism starting 2006.

5. General Description of Water Provision Service After the Privatization

Ever since the management of the clean water in Jakarta has been handed over to PT. Palyja and PT. TPJ, the service provided is still far from the expectation. It is indicated by the small coverage of service and the leakage rate of water which is still high. The condition of clean water provision up to year 2004 is explained on table 3 below.

Table 3
The Condition of Clean Water Provision in Jakarta in 2004

	PT. PAM LYONNAISE JAYA (Western Jakarta)	PT. THAMES PAM JAYA (Eastern Jakarta)
Population	5.459.500	4.536.200
Connection	337.640	368.250
Service coverage	49,18%	67,06%
Unaccounted of Water	46,85 %	47,88%
Water Sold	127.341.770 m ³ /year	143.542.487 m ³ /year
Production Capacity	153.069.467 m ³	277.407.110 m ³
People served	2.685.209	3.041.999
Public Hydrant	953	979

Source: Jakarta Water Regulatory Board

When further reviewed, the total service coverage from the private operators is 57,23 %, meaning, there is still 42,77% of Jakarta residence which is not yet served, whereas the total leakage rate is 47%.

To reveal the leakage rate more specifically, the amount of water sold from each operator since 1998 is specified in the table 4 below

Table 4
Water Production, Water Sold, and Water Leakage in 1998-2004

	PT PLYJA			PT. TPJ		
	Water Production (m³)	Water Sold (m³)	UfW (%)	Water Production (m³)	Water sold (m³)	UfW (%)
1998	150.451.285	89.165.168	61.286.117	245.874.361	91.962.344	153.912.017
1999	160.094.531	101.728.796	58.365.735	246.575.840	105.900.335	140.675.505
2000	147.442.950	110.405.290	37.037.660	234.270.208	117.944.722	116.325.486
2001	145.741.815	116.769.888	28.971.927	254.005.662	120.340.556	133.665.106

2002	153.758.626	126.200.288	27.558.338	253.290.634	128.960.781	124.329.853
2003	156.828.289	131.310.498	25.517.791	259.582.968	142.791.814	116.791.154
2004	153.069.467	127.341.770	25.727.697	277.407.110	143.542.487	133.864.623

Source: Secondary Data Analysis

Whereas water tariff and charge raise set by both private operators is explained in table 5 below.

Table 5
Water Charge dan Water Tariff, 1998-2005

Semester	Water Charge		Water Tariff	
	Water charge	Percentage of water charge raise (1998-2005)	Water tariff	Percentage of water tariff raise (1998-2005)
1/ 1998	1.602,81	201,88%	1.783,14	227,46%
2/1998	2.037,23		2.087,73	
1/1999	2.660,04		2.061,96	
2/1999	2.734,35		2.044, 55	
1/2000	2.897,26		2.023, 07	
2/2000	3.253,58		2.035,32	
1/2001	3.013,73		2.392,74	
2/2001	2.749,90		2.726,84	
1/2002	2.994,80		2.713,44	
2/2002	3.162, 13		2.675, 41	
1/2003	3.328,01		3.029,11	
2/2003	3.460,86		3.745,97	
1/2004	3.751,03		4.704,08	
2/2004	3.806,09		4.858,91	
1/2005	4.167,95		5.332,76	
2/2005	4.838,58		5.839,00	

Source: Secondary Data Analysis

Whereas the service coverage and the number of connection made during the period of 1998-2005 is illustrated on table 6 below

Table 6
Service Coverage and The Number of Connection of PT. PALYJA and TPJ

Year	PT. PALYJA		PT. TPJ	
	Service Coverage	Number of Connection	Service Coverage	Number of Connection
1998		225.813	56,9	278.083
1999	33,72	257.952	57,12	285.735
2000	37,86	290.524	59,45	304.303
2001	42,46	312.879	61,35	320.282
2002	44,17	329.987	62,17	336.550
2003	47,70	329.987	65,59	360.469
2004	49,18	337.640	67,06	368.250

Source: Jakarta Clean Water Regulatory Body

6. The Impact of Water Privatization to the Underprivileged

Most underprivileged in Jakarta has acknowledged that the water provision in Jakarta is operated by private corporation (Palyja and TPJ). The study conducted by KRuHA, by performing survey on 201 underprivileged people in Jakarta, indicates that 121 respondent (60%) stated that the water provision in Jakarta is operated by private corporations, where as the rest (40%) still think that the water provision in Jakarta is operated by PAM Jaya.

The underprivileged people also consider that the quality of service in clean water provision is still bad, it is indicated from the perception of the underprivileged toward the quality of water, water continuity, water flow, and service improvement in general. The Perception of 201 underprivileged people in Jakarta toward the quality of water is explained in the following table

Table 7
Respondent Perception toward The Quality of Water

Water Quality	Respondent	
	Number of Respondent	%
Smell	3	1
Smell and Dirty	15	8
Dirty	56	28
Chlorine	53	26
Colored	1	1
No complaint	73	36
Total	201	100

Source: Primary Data

Table 7 above reveals that most of the respondents (64%) had complaints about the water quality. Their complaints included among others water with bad odor, turbid water, water with the odor of Calcium Hypochloride, and water with color. The remaining respondents (36%) claimed that they had no complaints about the water quality.

Poor people's perception toward the continuity of water delivery is explained in the following table.

Table 8
Respondent Perception toward Water Continuity

Water Continuity	Respondent	
	Number of Respondent	%
< 6 hours	42	21
6-12 hours	44	22
13-18 hours	37	18
19-24 hours	78	39
Total	201	100

Source: Primary Data

Form the above data it is indicated that some respondents stated that the water provided for them is not for 24 hours, even 42 respondents (21%) stated that they only get water for less than 6 hours, while 44 respondents (22%), only get water for 6-12 hours per day. Hanya 78 respondents (39%) who is provided with water for 24 jam.

Respondent perception toward water flow can be seen in the following table

Table 9
Respondent Perception toward Water Flow

Water flow	Respondent	
	Number of Respondent	%
Little	71	35
Smooth	57	28
Obstructed	73	36
Total	201	100

Source: Primary Data

Based on the above table, most respondents stated that the flow of water provided is obstructed (36%) and little (35%). Only 57 respondent (28%) stated that the water provided flows smoothly.

Whereas the underprivileged opinion toward the quality of clean water provision service in general is given on the table below.

Table 10

Respondent Perception toward Service Improvement

Service Improvement	Respondent	
	Number of Respondent	%
Yes	32	16
No	169	84
Total	201	100

Source: Primary Data

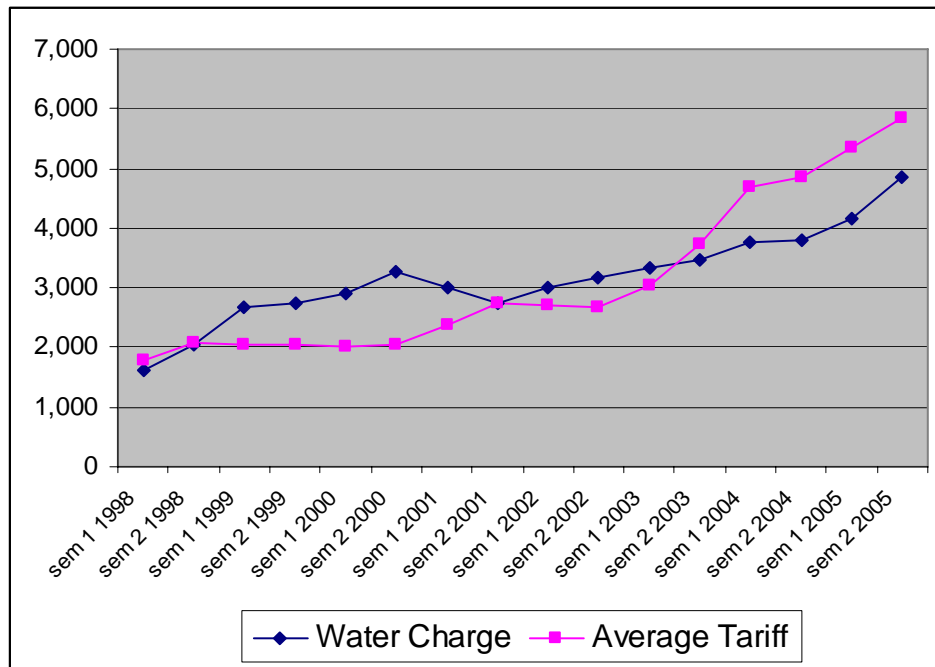
Table 10 above indicates that most respondents (84 %) stated that there is no improvement in the quality of service of water provision. Only 16 % respondent stated that there is improvement in the service.

7. Tariff Shortfall

A quite significant problem arising from water privatization in Jakarta is tariff shortfall. It happens due to the difference between water charge and water tariff (see tabel 5). Up to semester I of 2003, water tariff is lower than lower than water charge. Figure 2 shows the difference between water tariff and water charge from 1998-2005

Figure 4

Water Tariff and Water Charge, 1998-2005



The tariff shortfall causing PAM Jaya to bear debt not only to The Finance Department but also to its two partners (Palyja and TPJ). And to settle the debt, Regional Government of Jakarta burden it to the customer of clean water in Jakarta through Automatic Tariff raise effective since early 2005. With this policy, the water tariff in Jakarta is raised once every six months.

