

# PURSE / WET PROJECT

*Private Participation in Urban Services - Water Efficiency Team*

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## TECHNICAL ASSISTANCE FOR WATER EFFICIENCY TEAM (WET)

### INTERIM REPORT

**WET Report No.: LIR-DP/00/21**

*Submitted by :*

**Chemonics International, Inc.,  
Jakarta, Indonesia**

*In association with :*

**The Institute for Public-Private Partnerships (IP3)**

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# TECHNICAL ASSISTANCE FOR WATER EFFICIENCY TEAM (WET- 2)

## INTERIM REPORT EXECUTIVE SUMMARY

The Water Efficiency Team (WET) Technical Assistance Project was established in response to the Economic and Monetary Crisis' effects on local water enterprises (PDAM). The project is financed by USAID, in cooperation with the Indonesian Ministry of Home Affairs, Association of Water Enterprises Executives (Perpamsi).

In this Second Interim Report WET will detail the results of its field visits since the issuance of the first Interim Report issued in June 1999.

During the second phase of the WET - 2 program the WET team along with PERPAMSI initially selected 40 PDAM to review. However, two PDAM located in Aceh Province, Sumatra had to be eliminated due to security concerns. Subsequently 38 PDAM were examined. These are listed in Table 1.

Each of the 38 PDAM selected was carefully examined by WET. The examination consisted of careful scrutiny of the PDAM's ability to continue to provide service to its community. Further WET examined the quality of services currently being provided. From this review WET indicated its results and offered suggestions for improving overall performance.

### Results

The results of these investigations indicate that the majority of the 38 PDAM assessed share a number of common financial, managerial and technical issues that may be summarized as follows:

- low tariffs,
- high production costs,
- negative cash flow,
- significant investment in supply assets,
- insufficient number of customers,
- high idle or excess capacity,
- inadequate investment in distribution assets,
- low maintenance expenditures,
- high non-revenue-water, and
- high staff/connection ratios.

These results clearly indicate a more fundamental problem at most PDAM. While the financial condition and performance of each PDAM varied from critical to borderline, all 38 PDAM are in poor financial condition, and their ability to deliver an essential public service diminishes daily. Many communities are not well served by their water utility because their PDAM is unable to continue financing on-going operations or rather PEMDA is unable to subsidize the operation.

This state of affairs the result of, to a greater or lesser degree, all the maladies that are described above. These problems, particularly high idle capacity, NRW, maintenance, and the low tariff regime, all contribute to the poor service and financial distress observed in all 38 PDAM.

As result the level of service – the availability of potable piped water 24 hours per day – has been severely reduced or simply shut-off. In addition, the quality of treated water produced may pose a public health hazard.

PDAM production equipment is in such poor conditions that the ability of PDAM to improve and expand services, and raise water quality standards is impossible without repairing or replacing this equipment. Presently, many PDAM can not afford to pay PLN for their electricity let alone repair or replace production assets or reactive household connections.

More significantly, senior managers are either not aware of the magnitude of their problems or unable to effect changes to correct them. One of the most significant needs that WET has identified is improving the skills and quality of staff at PDAM to identify problems and effect solutions.

Second, WET is aware of the low pay scales at most PDAM. There appears to be no incentive for PDAM managers and employees to initiate changes to improve PDAM performance. In order for PDAM staff and managers to be responsive to improving performance, increasing coverage and servicing the community, incentive structures must be reformed to reward good performance and penalize substandard performance. Without emphasis on incentives and pay scales that encourage professionalism improvements in performance will be difficult to say the least. In addition to pay scales, greater employee motivation and job satisfaction will improve performance and garner respect for PDAM staff. Clearly, all PDAM must offer better training for their staff as well as rationalize how to improve staff motivation.

## **Recommendations**

To address these problems, WET believes that increased professionalism at all PDAM is absolutely required. Furthermore, most PDAM need to obtain funding to increase coverage in their communities. Initially the World Bank had intended to provide funding through the PDAM Rescue and Recovery Program but that program has been indefinitely postponed.

WET recommends a program aimed at targeting a number of PDAM assisted in the WET program for 'Intensive Care'. The intensive Care program would offer training, both

formal classroom and on-the-job, to improve the skills of PDAM managers and employees. Second the WET team would work together with PDAM to develop a business plan, that is targeted not at defining policies but at guiding management in its mission and strategy. The overall plan will be used to obtain external funding outside of traditional donor sources. If the problem were successful in assisting a limited number of hand-picked PDAM a more extensive program under the control of PERPAMSI would be envisioned.

# BANTUAN TEKNIK TIM EFISIENSI AIR (WET- 2)

## LAPORAN INTERIM RINGKASAN EKSEKUTIF

Proyek bantuan teknik Tim Efisiensi Air (WET) terbentuk dalam rangka menanggulangi dampak Krisis Moneter dan Keuangan terhadap Perusahaan Daerah Air Minum (PDAM). Proyek didanai oleh USAID, bekerja sama dengan Departemen Dalam Negeri, dan Persatuan Perusahaan Air Minum Seluruh Indonesia (PERPAMSI).

Pada Laporan Interim kedua ini akan diuraikan temuan-temuan hasil kunjungan lapangan setelah dihasilkan temuan-temuan pada Laporan Interim pertama yang diterbitkan pada Bulan Juni 1999.

Pada program WET – 2 ini, tim WET bersama PERPAMSI telah memilih 40 PDAM untuk dievaluasi. Akan tetapi, dua PDAM yang berlokasi di Provinsi Aceh, Sumatra, tidak dapat dikunjungi karena masalah keamanan. Dengan demikian, jumlah PDAM yang dikaji menjadi 38, seperti dirinci pada Tabel 1.

Ke-38 PDAM dipilih oleh WET untuk dikaji secara hati-hati. Pengkajian meliputi penelitian kemampuan PDAM agar tetap dapat melayani masyarakat. Kemudian, WET mengkaji kualitas pelayanan yang saat ini sedang diupayakan. Dari kajian ini, WET menguraikan hasil temuan yang diperoleh dan memberikan saran-saran untuk memperbaiki kinerja secara keseluruhan.

### Temuan-Temuan

Temuan-temuan dari penelitian ini menunjukkan bahwa mayoritas dari 38 PDAM yang dievaluasi menghadapi sejumlah permasalahan dalam bidang keuangan, manajemen dan teknik, dimana hal ini dirinci sebagai berikut:

- tarif yang berlaku rendah,
- biaya produksi tinggi,
- arus kas negatif,
- investasi yang besar pada semua penyediaan air bersih,
- jumlah pelanggan yang tidak memadai,
- besarnya jumlah kapasitas tidak terpakai atau kapasitas berlebihan,
- kurangnya investasi pada jaringan distribusi,
- kurang memadainya biaya pemeliharaan,
- tingkat kehilangan air tinggi, dan
- rasio staf per sambungan tinggi.

Temuan-temuan ini jelas menunjukkan bahwa kebanyakan PDAM menghadapi masalah yang lebih fundamental. Walaupun kondisi keuangan dan kinerja setiap PDAM berbeda, akan tetapi ke-38 PDAM tersebut mengalami kondisi keuangan yang sangat sulit, dan menurunnya kemampuan PDAM dalam memberikan pelayanan umum kepada masyarakat. Banyak masyarakat yang tidak dapat dilayani dengan baik oleh PDAM karena tidak mampu lagi membiayai kegiatan operasional sehari-hari atau bahkan PEMDA tidak dapat memberikan subsidi untuk membiayai kegiatan PDAM.

Uraian-uraian diatas telah menggambarkan sebagian besar permasalahan yang dihadapi. Masalah ini terutama adalah tingginya jumlah kapasitas tidak terpakai, tingkat kehilangan air, pemeliharaan dan tarif yang rendah, sehingga kualitas pelayanan menurun dan masalah keuangan dihadapi oleh ke-38 PDAM memburuk.

Sehingga tingkat pelayanan – ketersediaan air bersih selama 24 jam per hari – menjadi menurun atau bahkan terhenti. Selain itu, kualitas air olahan yang dihasilkan dapat memberikan risiko kesehatan terhadap masyarakat.

Peralatan produksi PDAM memiliki kondisi yang buruk, sehingga kemampuan PDAM untuk memperbaiki dan mengembangkan pelayanan, serta peningkatan kualitas air menjadi tidak mungkin dicapai tanpa memperbaiki atau mengganti peralatan tersebut. Saat ini, banyak PDAM tidak mampu membayar biaya listrik kepada PLN, apalagi memperbaiki atau mengganti aset-aset produksi atau mengaktifkan kembali sambungan rumah.

Tak kalah penting lagi, manajer senior kurang menyadari masalah besar yang dihadapinya atau tidak dapat membuat perubahan untuk memperbaikinya. Salah satu langkah yang dapat dilakukan menurut WET adalah memperbaiki ketrampilan dan kualitas staf PDAM untuk mengidentifikasi permasalahan dan mencari jalan keluar untuk mengatasi masalah tersebut.

Selain itu, WET menyadari rendahnya tingkat pendapatan yang diperoleh bagi kebanyakan staf PDAM. Tidak terdapatnya insentif yang memadai bagi manajer dan karyawan PDAM berakibat tidak adanya inisiatif untuk memperbaiki kinerja PDAM. Guna menjadikan staf dan manajer PDAM lebih responsif memperbaiki kinerja, meningkatkan cakupan dan pelayanan kepada masyarakat, struktur insentif harus dibuat memberikan penghargaan kepada karyawan yang memiliki kinerja baik dan memberikan sanksi bagi karyawan yang memiliki kinerja di bawah standar. Tanpa upaya-upaya perbaikan insentif dan tingkat pendapatan maka perbaikan profesionalisme kinerja yang diharapkan akan sulit dicapai. Sehubungan tingkat pendapatan, motivasi karyawan yang sangat baik dan kepuasan dalam pekerjaan akan memperbaiki kinerja dan memberikan kebanggaan bagi staf PDAM. Jelas kiranya bahwa semua PDAM harus menawarkan pelatihan yang lebih baik untuk para stafnya, begitu pula mengupayakan bagaimana memperbaiki motivasi staf.

## Saran-saran

Untuk mengatasi permasalahan yang dihadapi, WET yakin bahwa peningkatan profesionalisme di semua PDAM sangat diperlukan. Kemudian, kebanyakan PDAM sangat memerlukan dana untuk meningkatkan cakupan pelayanan kepada masyarakat. Bank Dunia semula bermaksud menyediakan dana melalui Program Penyehatan dan Penyelamatan

PDAM (the PDAM Rescue and Recovery Program), namun program ini ditunda untuk jangka waktu yang tidak terbatas.

WET menyarankan suatu program dengan menargetkan sejumlah PDAM yang akan dibantu oleh program WET yaitu 'Perlakuan Intensif' (Intensive Care). Program 'Intensive Care' akan menawarkan pelatihan, baik pelatihan dalam ruang kelas formal maupun pelatihan lapangan, untuk memperbaiki ketrampilan manajer dan karyawan PDAM. Kemudian, Tim WET akan berkerja sama dengan PDAM dalam menyusun rencana usaha, dimana tidak saja ditargetkan untuk menetapkan kebijakan, tetapi juga memberikan bimbingan manajemen dalam misi dan strategi. Rencana secara keseluruhan akan digunakan untuk memperoleh pendanaan eksternal selain sumber bantuan tradisional. Jika berhasil dalam membantu sejumlah PDAM terpilih, maka banyak program yang lebih ekstensif dibawah pengawasan PERPAMSI yang akan dapat dilakukan.

# TECHNICAL ASSISTANCE FOR WATER EFFICIENCY TEAM (WET- 2)

## INTERIM REPORT

### 1.0 INTRODUCTION

#### 1.1 Background and Objectives

The Water Efficiency Team (WET) Technical Assistance Project was established in response to the Economic and Monetary Crisis' effects on local water enterprises (PDAM). The project is financed by USAID, in cooperation with the Indonesian Ministry of Home Affairs, Directorate General of Public Administration and Regional Autonomy (PUOD) and the Association of Water Enterprise Executives (Perpamsi).

As Indonesia's economy spiraled out of control, many of the country's institutions were unable to cope with the heavy burden of escalating costs, and increasing interest rates. Those most severely effected during this crisis have been Government agencies that provide essential services to the urban poor.

As a result of the crisis, the urban poor have been confronted with job losses and shrinking personal incomes. This situation has created serious potential health problems and placed their families in grave danger. One of those dangers is access to clean drinking water, as PDAM have been severely impacted by the effects of the Monetary and Economic Crisis.

These PDAM have found it increasingly difficult to provide reliable services to their respective communities. In many cases, PDAM have curtailed or simply shut down their services because they have been unable to fund continuing operations. In addition, PDAM with outstanding Central Government debt have been unable to pay debt service. In some cases, these PDAM have been forced to sell assets, lay-off staff, reduce chemical dosing, reduce hours of operation, and generally reduce all expenses because of static revenues from fixed tariff regimes. The effect of these service reductions on public health and well being can and have been devastating.

The WET Technical Assistance Project was designed as a "Rescue Program" for PDAM, and its mandate is to respond to this need in order that PDAM can maintain a minimum acceptable service level during the crisis. The program aims to identify cost savings, improve cash flow, productivity improvements, efficiency gains and overall better management through broad based reforms at targeted PDAM. The benefits that accrue from this program have the most immediate effect on urban poor and in particular woman and children.

## 1.2 Methodology & Selection Criteria

The methodology and selection criteria employed in WET-2 to assist financially troubled PDAM have been the same as that which had been previously established for WET-1. These criteria were previously described in the June 1999 Inception Report and the first Interim Report. Briefly, the methodology employed and the selection criteria focused on providing advisory services to each PDAM in conjunction with identifying short-term and medium-term remedial actions to return these PDAM to financial health.

The WET Team was divided into three field teams. Each field team consisted of three members; that included a team leader, a senior engineer and a senior financial expert.

Each field team utilized standard documents that acted as guidelines for work execution. These had initially been prepared under WET-1, and included the Water Efficiency Questionnaire and the Administrative and Technical Audit Program.

## 1.3 PDAM Selected

The selection of PDAM to be examined was prepared in consultation with both PUOD and Perpamsi, keeping in mind the selection criteria discussed in our Inception Report.

Initially 40 PDAM were selected for WET-2, however two PDAM located in Aceh Province, Sumatra had to be eliminated due to security concerns. Subsequently 38 PDAM were examined. These are listed in Table 1. Table 1 also includes the provinces the PDAM are located in, and the dates of all field visits.

As PUOD and Perpamsi guided the choice of these PDAM, the most important criteria aside from suspected negative cash flows was the communities access to alternative water sources.

With multiple water supply alternatives, a PDAM may not be in a position to raise tariffs to satisfactory levels to return itself to profitability. If tariffs are raised, customers will likely use easily available and cheaper alternative supplies. In this circumstance, it is difficult to justify the continuing need for the PDAM's water supplies.

An example is PDAM Kabupaten Limboto, North Sulawesi. More than 50% of the population in the PDAM's service area have year-round access to good quality ground water supplies. Competing water sources coupled with the community's ability to pay for the PDAM's services threaten the viability of the PDAM. PDAM Muara Enim, South Sumatra is another example. More than half the Town's population use the Lenatang River.

In some cases, it was also recognized that two or more PDAM might benefit from economies of scale through conglomeration or consolidation. While WET observed instances where mergers of PDAM or their activities might be economically or operationally viable, specific suggestions regarding mergers and consolidations were beyond WET's Scope of Work and hence, only brief comments in this regard were included in the Field Reports.

Examples included Kotamadya Gorontalo and Kabupaten Limboto in North Sulawesi, and Kotamadya Kendari and Kabupaten Kendari in Southeast Sulawesi, and Asahan and Tanjung Balai in North Sumatra.

For each of the 38 PDAM selected, a preliminary field visit was made, and a Field Trip Report was subsequently prepared for each of these PDAM. The Field Trip Report included a discussion on the financial condition of the subject PDAM, its need for continuing technical assistance, and recommendations tailored to the specific needs of that PDAM.

## 2.0 INTERIM RESULTS

### 2.1 Field Visits

During WET-2, the three WET teams undertook a total of 50 field visits during the period June through December 1999. These included 38 visits to perform an efficiency review of the financial condition and technical operations of the subject PDAM, and 12 follow-up visits to review financial and technical recommendations. Field statistics compiled for each PDAM are listed in Appendix I.

The purpose of each field visit was two-fold. First, the WET Team needed to confirm the current financial condition of the subject PDAM. In particular, the WET Team needed to confirm that without substantial immediate cost savings and/or revenue increases the subject PDAM faced imminent insolvency and financial collapse. Second, the WET Team would advise the subject PDAM, on what measures could be taken to avoid the immediate concern of insolvency, and medium and long-term measures to ensure its continued survival.

In addition to the 50 field visits, WET has scheduled 14 follow-up visits for late January through mid-February 2000 as indicated in Table 1. This provides a total of 64 field visits for the 38 PDAM.

**Table 1. PDAM Visited**

PDAM	Province	Date of 1 <sup>st</sup> Visited	Date of 2 <sup>nd</sup> Visit
Asahan	North Sumatra	Jun 23-24	Aug 30-31
Tj Balai	North Sumatra	Jun 21-22	
Kodya Kendari	South Sulawesi	Jun 23-24	Aug 30-31
Kab. Kendari	South Sulawesi	Jun 21-22	Sept 1-2
Kab. Lamput	South Sumatra	Jun 21-22	Aug 30-31
Kab. Lamteng	South Sumatra	Jun 21-22	Sept 1-2
Png Pinang	Riau, Sumatra	Jul 5-6	Sept 6-7
Belitung	Riau, Sumatra	Jul 7-8	Sept 7-8
Musi Rw.	Jambi, Sumatra	Jul 12-13	
Muara Enim	Sumatra	Jul 14-15	
Biltar	E. Java	Jul 12-13	Sept 6-7
Jombang	East Java	Jul 14-15	Sept 7-8
Bungo Tebo	Jambi, Sumatra	Aug 2-3	Sept 13-14

TABLE 1 - PDAM Visited (continued)

PDAM	Province	Date of 1 <sup>st</sup> Visited	Date of 2 <sup>nd</sup> Visit
Sako	Jambi, Sumatra	Aug 4-5	Sept 14-15
Pamekasan	East Java	Aug 2-3	
Sampang	East Java	Aug 4-5	
Pekalongan	Central Java	June 14-16	Aug 23-24
Kab. Banjar	South Kalimantan	Oct 12-14, 1999	
Amuntai	South Kalimantan	Oct 12-13, 1999	Feb 2-4, 2000
Kodya Gorontalo	North Sulawesi	Oct 12-13, 1999	Jan 31-Feb 2, 2000
Kab. Limboto	North Sulawesi	Oct 13-14, 1999	Jan 31-Feb 2, 2000
Kapuas	Central Kalimantan	Oct 12-13, 1999	
Barabai	South Kalimantan	Oct 12-13, 1999	Jan 24-27, 2000
Wajo	South Kalimantan	Oct 10-12, 1999	Feb 25, 2000
Sinjai	South Sulawesi	Dec 1-2, 1999	Feb 24, 2000
Lahat	Sumatra	Dec 1-2, 1999	Jan 24, 2000
Banyuasin	Sumatra	Dec 14-15, 1999	Jan 25, 2000
Binjai	North Sumatra	Nov 3-4, 1999	
P. Siantar	North Sumatra	Nov 4-5, 1999	
Biak	New Paupa	Dec 2-3, 1999	Feb 10-12, 2000
K. Asem	Bali	Nov 16-18, 1999	Feb 15, 2000
Tanah Laut	South Kalimantan	Nov 17-18, 1999	Jan 25-26, 2000
Solok	West Sumatra	Nov 1-2, 1999	
P. Panjang	West Sumatra	Nov 1-2, 1999	
Sawah Lunto	West Sumatra	Nov 1-2, 1999	Feb 7-8, 2000
Bengkulu Selatan	Bengkulu, Sumatra	Nov 29-30, 1999	Feb 18, 2000
T. Pinang	Riau, Sumatra	Dec 7-8, 1999	Feb 14-16, 2000
T. Uban	Riau, Sumatra	Dec 9-10, 1999	

## 2.2 Results & Common Issues

The results of these investigations indicate that the majority of the 38 PDAM assessed share a number of common financial, managerial and technical issues that may be summarized as follows:

- low tariffs,
- high production costs,
- negative cash flows,
- negative operating ratios,
- significant investment in supply assets,
- insufficient customer bases,
- high idle or excess capacity,
- low maintenance expenditures
- high non-revenue-water, and
- high staff/connection ratios, all contributing to their poor performance.

### 2.2.1 Tariffs – Findings

All PDAM in Indonesia have fixed tariff schedules that are established by the PDAM in consultation with their respective local governments. Typically, a tariff schedule consists of a series of customer classifications, which includes a number of specific types of customer categories as illustrated in Table 2.

The example shown in Table 2 is the newly revised tariff schedule of PDAM Musi Banyuasin, Sumatra which become effective on March 1, 2000. This particular PDAM had not increased its tariffs since 1992.

Table 2. Tariff Schedule of PDAM Banyuasin.

<i>Customer Category</i>	<i>Category of Water Consumption</i>			
	0-10 m <sup>3</sup> Rupiah/m <sup>3</sup>	11-20 m <sup>3</sup> Rupiah/m <sup>3</sup>	21-30 m <sup>3</sup> Rupiah/m <sup>3</sup>	< 30 m <sup>3</sup> Rupiah/m <sup>3</sup>
<b>Social</b>				
General Social	300	300	300	300
Specific Social	300	300	300	300
<b>Non-Commercial</b>				
A.	400	550	800	1,100
B.	350	500	750	900
<b>Commercial</b>				
Small	750	750	1,500	1,500
Large	1,100	1,100	2,200	2,200
<b>Industrial</b>				
Small	1,200	1,200	2,400	2,400
Large	1,500	1,500	3,000	3,000
<b>Special Class</b>				
Estate	6,000	6,000	6,000	6,000

Each customer category is sub-divided by the specific nature or use of that classification and governed by a set of established regulations. For example, the General Social category includes fire hydrants and places of worship such as Mosques. The Non Commercial Type A category includes medium – large income households, government offices, schools,

including colleges and universities, and clinics and hospitals, while the Non-Commercial Type B category includes only low-medium income households.

Similarly, the Commercial category is sub-divided and includes Small Commercial entities such as warungs and bengkels, and private clinics, while the Large Commercial category is reserved for Hotels, Offices, and Shopping Malls. A copy of the complete tariff schedule for PDAM Banyuasin is provided in Appendix II.

WET's review of each PDAM's tariff schedule was done to ensure that all potential customers and "uses" within a particular community were included by the PDAM for billing purposes.

This review was also useful in checking meter coverage, demand forecasts, and also as an indicator of the diversity of the local economy. A small number of customer categories generally reflects a predominately residential population, while large categories of customers typically indicates a diverse customer base, and identifies the larger water users such as textile and manufacturing operations.

All of the 38 PDAM reviewed have customer bases that are predominately residential in nature, with very few large industrial users. A more detailed discussion on service coverage is provided in Section 2.2.5.

In addition to the tariff classification, the WET teams also focused on the average tariff of each PDAM. The average tariff is a good measure of the financial discipline of a utility and its autonomy to cover operating costs with revenues from tariffs.

The average tariffs for the 38 PDAM reviewed ranged from a low of Rp 332/m<sup>3</sup> a high of Rp 1,561/m<sup>3</sup>. The mean or average tariff for all 38 PDAM was Rp 682/m<sup>3</sup>.

A comparison of the average tariff and the production cost per cubic meter of water sold for each of the 38 PDAM indicates that 66% of the PDAM had average tariffs lower than the cost of production, before depreciation and interest charges were added.

Twenty-five PDAM had an average tariff that was less than their respective production cost, before depreciation and interest, and 13 PDAM had an average tariff that was greater than their production costs, before depreciation and interest.

The average tariff for all 38 PDAM covered approximately 96% of production costs, before depreciation and interest charges were taken into consideration. The result was a number of PDAM showed positive cash flows sufficient to finance their daily operations. However, when depreciation and interest charges were added, the resulting average tariff covered less than 58% of their average production costs. The resulting deficits are subsidized by PEMDA, at a significant cost to the general public. Table 3 shows the comparison of the average tariff for the 38 PDAM and the average production costs before and after interest and depreciation charges were calculated.

WET observed that in almost every instance, PDAM ignored depreciation costs because it did not require an immediate outlay of cash. Depreciation is a reserve for capital costs that

have been incurred and will be incurred in the future to replace existing assets in operations. To neglect the need to provide for full cost recovery, including depreciation is a serious error. Because depreciation is based on historical cost, the problem is exacerbated as returns on investment must exceed inflation.

Table 3. Comparison of the Average Tariff and Production Costs for 38 PDAM.

Average Tariff Rp/m <sup>3</sup>	Average Cost Before Dep. & Int. Rp/m <sup>3</sup>	Average Cost After Dep. & Int. Rp/m <sup>3</sup>
682	713	1,203

As expected, the low average tariff is indicative of the seriously restricted autonomy of PDAM to cover their operating costs with revenues from tariffs. This situation has resulted in numerous examples of reduced expenditures for maintenance, and reduced chemical usage that has impacted water quality standards to such an extent that, in many cases poses a significant public health hazard.

PDAM Tanjung Uban's maintenance program for example, was reduced to such an extent that an impoundment reservoir's storage capacity was reduced 50%. This situation resulted from a build-up of silt deposits in the reservoir and erosion of its embankments that severely limit the PDAM's ability to provide water to its customers, particularly during the dry season. PDAM Sawah Lunto has been unable to replace two raw water intake pumps for its treatment facility resulting in an estimated 70% idle capacity, and PDAM Lahat's diminished water quality poses a number of serious public health problems. Similar conditions exist in all PDAM.

Low tariffs are also responsible for reduced and curtailed asset replacement programs. This condition is particularly noticeable with the enormously high number of reported broken service connections and damaged water meters in all PDAM. All PDAM reported between 10%-50% of all installed meters were in need of repair or replacement, as well as individual connections. Similarly, many PDAM had also experienced major production and distribution equipment failures because they have not reserved sufficient funds to replace equipment after its "useful life".

Low tariffs have not allowed of indebted PDAM to service their debts, whether to central government, PEMDA or suppliers. Nine of the 38 PDAM visited have no significant debt, while 29 PDAM have debt averaging Rp 6.25 billion, and have made no provisions to service this debt.

One example is PDAM Kotamadya Kendari. They are Rp 12.6 billion in debt through investments in water treatment capacity. It should be noted that the majority of these investments were Central Government driven and transferred to the PDAM upon project completion with very limited input from PDAM Kendari. Similar problems exist in other PDAM that WET observed.

WET also observed that more than 94% of the PDAM visited had not increased their tariffs in five years. The majority of PDAM have been operating with deficits since their establishment. As previously mentioned, some PDAM have not increased tariffs since 1992, with several others since 1989.

All 38 PDAM visited stated that their requests to PEMDA for tariff increases were either rejected outright or delayed significantly. The reasons for these delays are essentially a combination of economics and politics. Previously, government officials were reluctant to increase tariffs because of the assumed hardships the increases would impose on the community, and the assumed backlash this would have had on local and regional elections at the time.

WET also observed that all 38 PDAM did not operate as one might expect as typical public utilities, focused on customer service, employing demonstrated commercial concepts and commercial principles. PDAM staff and PEMDA officials perceive the PDAM's role as a "social organization", contributing to the Government's regional and national development plans and philosophy, and not as a public service organization. Exacerbating this issue are an entrenched dependence on the Government for financial support, both locally and nationally, and the limited understanding of real commercial concepts in both PDAM and PEMDA officials.

While WET does not believe that low tariffs are the sole reason for PDAM's financial stress, it is clearly one of the main causes. Most PDAM sell water to their customers for less than \$0.10/m<sup>3</sup>. This low tariff regime gives rise to poor quality and poor service. The concern that WET has is instituting tariff increases without a demonstrable increase in service levels. People do not want to pay for poor service and poor water quality. It is a fact that all people in the community use water from one source or another. In many cases paying more for water than the tariff charged by PDAM.

#### **2.2.1.1 WET Tariff Recommendations**

WET teams spent considerable time during each visit discussing tariffs, affordability issues, alternate sources of water supply for both customers and the community, and the ability and need of the PDAM to increase their respective tariffs to cover all operating costs.

In support of these recommendations WET prepared pro-forma financial analyses. The financial analyses took into account new investment, operating costs, salary increases, new connections, inflation and debt service. The result was the needed tariff increase to support on-going operations.

After preparing the pro-forma analyses, each WET field team had candid discussions with PDAM management regarding the proposed tariff increases. In a number of cases, the WET teams, at the request of PDAM, made presentations to the PDAM's Badan Pengawas (Supervisory Board), the Walikota or Bupati, other senior PEMDA officials and in some cases the DPRD (Dewan Perwakilan Rakyat Daerah or Local Parliament).

recommended tariff increase was 43%. WET identified 17 PDAM requiring immediate tariff increases. 21 PDAM can phase-in their tariff increases over the next 6-12 months.

Some examples include a 15% increase in the average tariff for PDAM Kapuas in the first quarter of 2000, a 25% increase for PDAM Barabai, a 60% increase for PDAM Lubuk Linggau, and a 95% immediate increase in the basic tariff for PDAM Gorontalo. Table 4 provides a complete list of the current average tariff in each of the 38 PDAM visited and WET's recommended tariff increase for each PDAM, shown as a percentage of the existing average tariff.

To date, WET has received assurances or confirmed increase at 32 of the 38 PDAM visited that WET's recommended tariff increases will be implemented by PDAM within the timeframe proposed. All tariff increases will occur with the explicit support of the respective local government.

Table 4. Current Average Tariffs and WET Recommended Tariff Increases.

PDAM	Average Tariff Rp/m <sup>3</sup>	WET Recommended Tariff Increase %	Confirmed Increase
Kab. Asahan	549	30% in the 1 <sup>st</sup> Quarter 2000	✓
Kota Balai	731	30% in the 1 <sup>st</sup> Quarter 2000	✓
Kota Kendari	781	60% in the 2 <sup>nd</sup> Quarter 2000	✓
Kab. Kendari	759	50% in the 4 <sup>th</sup> Quarter 1999	✓
Kab. Lampung Utara	622	50% in the 4 <sup>th</sup> Quarter 1999	✓
Kab. Lampung Tengah	669	21% in the 3 <sup>rd</sup> Quarter 1999	✓
Kota Png.Pinang	773	40% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Belitung	531	40% in the 3 <sup>rd</sup> Quarter 1999	✓
Kab. Muara Enim	894	20% in the 2 <sup>nd</sup> Quarter 2000	✓
Kab. Musi Rawas	438	66% in the 4 <sup>th</sup> Quarter 1999	✓
Kota Blitar	587	35% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Jombang	405	30% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Bungo Tebo	816	60% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Sarolangon	856	30% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Pamekasari	554	30% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Sampang	332	60% in the 3 <sup>rd</sup> Quarter 1999	✓
Kab. Pekalongan	388	30% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Banjar	803	28% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Aruntai	677	5% in the 1 <sup>st</sup> Quarter 2000	✓
Kota Gorontalo	878	95% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Limboto	714	100% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Kapuas	721	15% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Barabai	685	25% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Wajo	743	45% in the 2 <sup>nd</sup> Quarter 2000	✓
Kab. Sinjai	815	30% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Lahat	1,039	Financial Data was not available	
Kab. Banyuasin	416	60% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Binjai	618	Financial Data was not available	✓
Kab. Siantar	632	30% in the 3 <sup>rd</sup> Quarter 2000	✓
Kota Biak	859	28% in the 1 <sup>st</sup> Quarter 2000	✓

PDAM	Average Tariff Rp/m <sup>3</sup>	WET Recommended Tariff Increase %	Confirmed Increase
Kab. Karangasem	459	15% in the 1 <sup>st</sup> Quarter 2002	✓
Kab. Tanah Laut	465	33% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Solok	652	30% in 2 <sup>nd</sup> Quarter 2000	✓
Kab. P. Panjang	542	50% in the 1 <sup>st</sup> Quarter 2000	✓
Kota Sawah Lunto	469	15% in 1 <sup>st</sup> Quarter 2002	✓
Kab. Bengkulu-Selatan	483	100% in the 1 <sup>st</sup> Quarter 2000	✓
Kab. Tj. Pinang	1,561	40% in the 3 <sup>rd</sup> Quarter 1999	✓
Kab. Tj. Uban	1,013	20% in the 2 <sup>nd</sup> Quarter 2000	✓

The recommended tariff increases will support existing operations, finance and recommended improvements, such as asset replacement and maintenance, and allow PDAM to service their outstanding debt.

### 2.2.2 Production Costs Findings

Average production cost is measured as the total cost of producing clean water divided by the total volume of in cubic meter of water produced.

Production cost includes all administration and personnel, operations and maintenance, including chemicals and power, depreciation and interest.

As expected, production costs varied with each of the 38 PDAM. This cost of production varies depending on the raw water source, raw water quality, pumping and storage requirements, power supply, and treatment processes employed. For example, a gravity fed spring water source will be far less expensive to operate than water extracted from a river that needs to be treated and pumped to be distributed.

Production costs ranged from Rp 361/m<sup>3</sup> to Rp 1,725/m<sup>3</sup>, before depreciation and interest. When depreciation and interest charges were added, the same production costs ranged from Rp 480/m<sup>3</sup> to Rp 3,284/m<sup>3</sup>. Details for each PDAM are listed in Appendix I.

As shown in Table 3, average production cost for all 38 PDAM was reported as Rp 713/m<sup>3</sup>, before depreciation and interest, and Rp 1,203/m<sup>3</sup> including depreciation and interest.

While 13 PDAM had sufficient cash flows to cover their production costs, before depreciation and interest, none of the 38 PDAM are capable of covering their full cost production (including depreciation and interest) nor service debt.

Surprisingly, travel and office expenditures were often the highest indirect cost category for all PDAM. These included trips to attend conferences, meetings, office entertainment, and other activities that are not necessarily associated with income generation.

Chemical costs were generally the highest direct cost category. Since chemicals used in the purification process are mostly imported, costs have increased dramatically as the Rupiah

depreciated. As a result, many PDAM have chosen to reduce their chemical dosing, particularly the application of chlorine. Lower chlorine dosing has in many instances resulted in high levels of contaminants in the water supply, increasing the risk of water borne diseases and skin infections.

Similarly power costs for all PDAM have also increased dramatically. Further complicating this situation and contributing to higher energy costs is the industrial classification imposed on PDAM by PLN. As an "industrial customer", PDAM are required to pay the most expensive tariff for electricity.

PDAM Lampung Utara is a typical example. Its operating costs increased an estimated 30% over the previous year. In 1998, its total operating expenses were Rp 1.5 billion, with an operating income of less than Rp 500 million. It owes PLN approximately Rp 98 million. As a result, PLN shut-off power to its water treatment works for over one month.

In addition, WET also observed that some PDAM are still making contributions to PEMDA as advanced payments for PAD (regionally derived revenue). Ministry of Homes Affairs regulations allow PDAM to defer any such payments until service coverage exceeds 75% of the population. None of the PDAM reviewed by WET exceed this figure.

#### **2.2.2.1 WET Production Cost Recommendations**

WET believes that PDAM must adopt and employ full cost recovery mechanisms for their operations, assume full responsibility for all expenditures incurred by their respective organizations, and manage these expenses in the most cost efficient manner. WET recommended a number of cost saving measures for each PDAM. Details of these measures are included in each Field Report.

These measures focus on immediate short term actions to reduce costs. These included for example, recommendations for an immediate assessment of all operating costs by the subject PDAM, and the introduction of monthly and quarterly cost saving actions to reduce all administrative and operating expenses. One troubling feature is the cost of travel to and from conferences and meetings. Often PDAM Directors are instructed to travel to Jakarta by Central Government Ministries. PDAM must pay its own expenses. Hopefully, with the implementation of the new decentralization law this practice will be discontinued.

All cost saving recommendations were subsequently discussed in detail with PDAM management during follow-up visits. As previously mentioned 25 of the 38 PDAM were revisited, and all 25 indicated their support for implementing these measures in conjunction with the previously suggested tariff increases.

While each PDAM budgets its future activities annually, monitoring variances is often not done. Second, the budget process should not be reduced to merely applying an inflation factor to the prior year's figures. Instead, PDAM must take a more businesslike approach toward its budgeting activities. Budgets should be based upon justifying the need for the expenditure and then incorporating the needed expenditure in an overall plan for corporate management. This plan should form the basis of a "Corporate Business Plan". The Corporate Business Plan is a tool that can be used for planning not only new investments but

also revenue and cost implications that will lead to better management of PDAM and heightened professionalism.

### 2.2.3 Operating Ratios Findings

Negative operating ratios are caused by the low tariff regime, high operating costs, and often high idle capacity. The operating ratio is defined as operating costs divided by operating revenues. This indicator is important in determining whether revenues from water sales cover operating and maintenance costs (exclusive of depreciation and interest).

At the 38 PDAM operating ratios ranged from 27% to 103%. The average operating ratio was 68%.

PDAM Binjai had the lowest operating ratio at 27%. Its average tariff is Rp 618/m<sup>3</sup> and average production cost, including depreciation and interest is Rp 1,522/m<sup>3</sup>. Similarly, PDAM Tanah Laut's operating ratio is 47%, due in part to low tariffs, high operating costs and idle capacity. PDAM Bengkulu-Selatan has low tariffs, idle capacity of almost 70% and high operating costs. Details for each PDAM are listed in Appendix I.

It is obvious that PDAM's do not generate sufficient revenues and the long-term consequences will have significant impacts on the PDAM's ability to provide an essential public service. To alleviate this problem, PDAM and local government must fundamentally alter their perception of their water supply.

#### 2.2.3.1 WET Operating Ratio Recommendations

Operating ratios are a product of all business factors. To achieve profitability PDAM must include planning measures that ensure profitable operations. These measures include capital planning that provides for adequate returns on funds invested for new assets. WET has found that as new production assets are added, funding for new connections are not planned into the process. Hence idle capacity increases as new capacity is built. Planning processes must take into account available funding for new connections. As we discuss below, idle capacity at most PDAM WET examined has added greatly to their woes.

Further issues effecting operating ratios include high operating costs and low tariff regimes. Some of the high costs are attributable to the Monetary Crisis and Rupiah devaluation. However, numerous high costs are clearly under the control of PDAM management. Reaction to cost increases is neither swift nor effective. Unfortunately many PDAM directors are unwilling or unable to effect changes that will lower costs or at least address sharp cost increases until it is too late.

### 2.2.4 Idle Capacity Findings

The majority of PDAM have concentrated on investments in building water supply capacity rather than on servicing customers through new connections. As a result, significant idle capacity exists in most PDAM. While this overbuilt supply averages 35% for the 38 PDAM

visited, 18 of the 38 PDAM exceed 45%. The worst examples include Sawah Lunto and Limboto with idle capacity of 74% each, Lampung Utara with 72%, and Blitar with 60%. The percentage of idle capacity for each PDAM is provided in Appendix I.

It is evident that PDAM need to achieve a balance and match supply with demand in their respective communities. Meeting consumer needs and preferences, and providing reliable service requires planning, continuous dialogue with the community and sound financial management. As a public utility, PDAM must focus on listening to their customers' needs, improving service delivery and expanding service coverage with new metered connections to match supply.

Before new capacity is developed, there must be clear demand for this capacity. If there is demand, it is essential that accompanying investments in distribution assets be included. All too often investments in water supply assets are built with the expectation that PDAM will build the distribution system. It is clear from the data compiled by WET that PDAM do not possess sufficient capital to install distribution mains and house connections. No funds are generally provided through the Central Government borrowing mechanisms. PDAM are expected to pay for these assets themselves. It is unclear where in the planning process the cash resources for these expenditures was to come.

New investment funding is generally provided by donor based loans accumulated in the Regional Development Account (RDA). Continuing pressure to spend these funds has led to many of these investments. Central Government Ministries with access to RDA funds develop studies and meet local communities in an attempt to move the money. Once the local government agrees to accept the debt the Central Government no longer provides advice or money to assist local government in managing the assets or paying the debt. It is clear that this "top down" system of asset acquisition has played a role in the significant over-capacity found in many PDAM

Worse still there does not appear to be any mechanism to monitor debt repayment and if complementary investments are occurring. This has resulting in finger pointing with no one accepting responsibility. In normal commercial project lending, the bank would monitor the project to determine if all assets needed to generate the revenues and returns envisioned in the initial business plan were put in place. These will include assets funded by the bank as well as by the lender. Without assuring that the project taken as a whole is built, the lender cannot be certain that the project finance targets will be achieved.

#### **2.2.4.1 WET Idle Capacity Recommendations**

WET believes that the concept of demand management, by pricing and public awareness, needs to be extensively introduced to the PDAM and PEMDA, and reinforced with appropriate training and monitoring.

WET has included technical recommendations tailored to the specific needs of each PDAM to address idle capacity in each Field Report. While these measures include expanding service coverage, improving pumping efficiencies and hours of operation, and technically-related measures to reduce idle capacity, the concept of demand management and its application needs to be instilled in PDAM and PEMDA officials.

Almost as important, PDAM and PEMDA must be solely responsible for initiating Central Government loan requests. This requires PDAM to develop demand forecasts and profiles for their community. Once it is clear that sufficient demand exists, only then should PDAM look to develop new water supplies. However, any new supply must be coupled with delivery.

Funding mechanisms must also require responsibility and accountability. This means that Central Government institutions responsible for donor on-lending activities should be responsible for ensuring sound commercial practices on the part of the PDAM. Further, the Ministry of Finance, Bappenas and Cipta Karya must develop a cooperative framework whereby the common vision is ensuring financially sound project development and finance are put in place. Secondly, PDAM must be in a position to seek funding through alternative commercial sources. Donors should encourage commercial funding and avoid crowding out commercial lenders. Donors can achieve this goal by helping to form lending consortiums that include commercial lenders and ensuring that the Ministry of Finance no longer provides subsidized credits to PDAM.

### 2.2.5 Service Coverage & Connections Findings

Considering the high levels of investments made in water related infrastructure by the Government, service coverage for all 38 PDAM is very low. Only 4 PDAM had service coverage that exceeded 45% of the population, and these ranged from 50% of the population to 66% of the population served.

Thirty-four PDAM had significantly less coverage that varied from a low of 4% of the population to 45%. The average for all 38 PDAM is only 26% service coverage. This figure may be even lower because of the questionable customer lists, as-built records of most PDAM, and designated service area with each PDAM.

Examples of low coverage include Musi Banyuasin which serves approximately 4% of its population of 1.1 million residents, Limboto with 6% coverage for 672,000 residents, Musi Rawas with 11% coverage for 607,520 residents, and Lahat which serves less than 20% of its population of 638,580 inhabitants. Appendix I lists the percentage of service coverage and number of existing connections for each PDAM.

The low coverage is reflected in the number of service connections established within each PDAM. The average number of connections for all 38 PDAM is 7,137 connections per PDAM.

While many PDAM have long lists of potential new customers waiting for connection, in some cases in excess of 1,000 new households, PDAM are not capable of financing these new connections. For examples Bengkulu Selatan which has a waiting list of 1,600 households, and Asahan, 1,000 households. Other PDAM have similar, yet smaller lists of customers waiting to connect. Tanah Laut for example has 200 households waiting to connect.

In addition to wait-listed customers, a number of PDAM have relatively large numbers of inactive connections. These include customers whose water supply was shut-off because the PDAM could no longer afford to service them or their water supply was curtailed because of equipment and/or supplier-related problems.

PDAM Lampung Utara is but one example. An estimated 24% of its 6,360 connections are inactive. Insufficient water supply is blamed for not being able to service these customers. However, other more disturbing factors have led to these shut-offs. Musi Banyuasin recently shut-off 1,200 households because it could no longer afford to operate the system serving these customers. In this particular case the nearest water supply is the Musi River, which is 3.5 km away from the nearest household.

Most PDAM are unable to accurately and reliably measure the volume of water sold to each customer. All revenues are predicated on this extremely important measurement. While most service connections are installed with water meters, roughly 40% of all meters installed for all 38 PDAM need to be either repaired or replaced.

This is perhaps the single most important area requiring improvement among the PDAM. Not one of the 38 PDAM have 100% metering of production, distribution and consumption, let alone regular replacement and maintenance of installed meters. Almost none of the PDAM regularly bench test and recalibrate meters.

Lampung Utara which needs to replace 1,000 broken water meters, Limboto which has over 1,500 meters in need of replacement, and Kendari with 950 broken meters. Similar examples exist in all 38 PDAM, and details of each are included in the individual Field Reports.

In addition to broken or damaged water meters, many PDAM have damaged household connections. Bengkulu-Selatan for example has over 500 individual connections in need of repair.

Similarly, all 38 PDAM have public taps. These types of connections are generally provided in rural areas, such as IKK systems and in urban lower income areas. Extensive use of public taps represents not only a lower level of service, but also reduces water accountability and potential revenue, and increases water losses through wastage. PDAM Tanah Laut for example has over 156 public taps servicing an estimated 3,120 households, and through WET's investigation we determined that much of its non-revenue-water is associated with this type of service.

It is evident that a significant effort needs to be made to expand service coverage in all 38 PDAM through new metered connections, concentrating first on those wait-listed households and customers, followed by repairs of broken meters and connections, phasing out public taps, and expansions into non-serviced areas.

#### **2.2.5.1 WET Service Coverage Recommendations**

WET's recommendations addressed each of the above mentioned measures, and included installation of new service connections for 27 of the 38 PDAM visited. The recommended average increase is 1,495 new connections for each of these 27 PDAM. Appendix II lists the

existing number of connections for each of the 38 PDAM, and these proposed new number of connections for the 27 PDAM.

WET believes that PDAM must budget and plan to increase connections by 5% annually. Furthermore, planning activities need to be revised to determine funding scenarios and real demand forecasts. In WET's investigation we were able to identify new connections by looking at waiting lists. WET's approach was the most conservative. However, PDAM must promote the use of their service by ensuring that consumers are aware of service improvements and supply is available. Details of these for each PDAM are provided in each Field Report.

WET also provided recommendations for repairs or replacement to broken meters, suggestions for reactivating previously shut-off customers, and other performance improvements to increase the levels of service in each PDAM.

#### **2.2.6 Non-Revenue-Water Findings**

High non-revenue-water (NRW) contributes to the poor financial performance of the PDAM though higher expenditures on chemical, electricity and operating costs. While WET did not undertake extensive investigations of NRW causes, it did note that NRW ranged from 20% to 60% in all 38 PDAM, and overall NRW averaged 34%.

While the average is lower than our original expectations, this figure may be much greater. NRW is calculated based upon the billed water supplied. Second, most PDAM don't have master meters and measure production by pump operating time. WET quickly recognized that most PDAM are unable to accurately measure production, distribution or sales volumes. WET observed that many PDAM relied on estimates of production capabilities rather than actual output.

This figure may also be higher because of the significant number of broken service connections and water meters in each PDAM. All PDAM that WET visited had large numbers of broken meters.

##### **2.2.6.1 WET NRW Recommendations**

WET's recommendations included measures to reduce NRW through replacement or repair of existing water meters, introduction of meter maintenance programs with or without contractors, improved recording of production, distribution and sales volumes by installing appropriate meters, improved reporting procedures of damaged meters, and improved procedures for repairing meters.

WET's recommendations and subsequent discussions with PDAM management stress the importance of accurately measuring production and sales volumes to improve the financial performance of the PDAM.

In addition WET recommended the establishing distribution zones for PDAM, and specific system improvements aimed at reducing overall NRW to approximately 25% over a five year period.

### **2.2.7 Overstaffing Findings**

Staff per connection ratio measures operating efficiency of PDAM employees. The ratio is generally expressed as the number of staff per 1,000 connections. High ratios generally indicate a low level of efficiency. WET estimates that an acceptable efficiency ratio in Indonesia of 7 employees per 1,000 connections is needed. Most PDAM exceeded efficient staffing ratios. Thirty-one of the 38 PDAM had staff/connection ratios of 10 staff/1,000 connections or more. The worst staff per connection ratios were in Kabuptaen Kendari with 22 staff/1,000 connections, Lampung Utara with 20 staff/1,000 connections and P. Siantar with 24 staff/1,000 connections.

While the average for the 38 PDAM was 13 staff/1,000 connections, only 7 of the 38 PDAM visited had ratios of less than 10 staff/1,000 connections. Staff ratios for each PDAM are also included in Appendix I.

The reasons for such excessive staff are both political and management. Politically, PDAM is often used as an employment machine to reduce local unemployment, and also in support of political patronism. While WET did not investigate whether 100% of all employees worked at the PDAM full time, WET suspects that sleepers may also exist on some payrolls.

WET also observed that PDAM that operated smaller separate water supply systems or IKK typically had a full or bloated complement of staff rather than optimal staff levels. Not one PDAM employed the concept of economies of scale or multiple tasks for personnel.

#### **2.2.7.1 WET Recommendations**

WET's recommendations called for each PDAM with excessive staff to connection ratios to review their respective internal operating policies and reduce the level of staff 40%-50% over a defined period.

For example, PDAM Musi Banyuasin has a ratio of 26 staff per 1,000 connections. WET recommended reducing this to 10 per 1,000 connections over the next three years. Similar reduction suggestions were made for all 38 PDAM visited.

While staff employment is considered a relatively sensitive issue in all PDAM, WET believes that its discussions on this issue were respected and subsequently all PDAM agreed to the recommended hiring freezes. During the current Economic Crisis it is likely to be politically unacceptable to lay-off staff. Therefore, WET has recommended gradual reductions in staffing levels. If, however, it were possible to reduce staff levels more rapidly, the increased productivity and cost would contribute to immediate increases in profitability.

### **2.2.8 Accounts Receivable Turnover Findings**

Because WET is focused on cash flows, WET also reviewed each PDAM's accounts receivable turnover and general collection efficiency. These parameters are generally good measures of the efficiency of a PDAM's financial management and the willingness to pay on the part of the community. Accounts receivable turnover is measured by determining the average time it takes consumers to pay for water consumed.

As expected, accounts receivable turnover varied from a low of 30 days for PDAM Sawah Lunto to a high of 230 days for PDAM Biak. It is worth noting that PDAM Sawah Lunto contracts this component of its operations to a local cooperative. Before this occurred, its turnover period exceeded 70 days. No other PDAM had similar arrangements.

Only 4 of the 38 PDAM had accounts receivable turnover of less than 40 days, and these ranged from 30-39 days. Nineteen PDAM were less than 100 days, ranging from 50-99 days, and 15 exceeded 100 days, varying from 102 days - 230 days. The accounts receivable turnover average for all 38 PDAM is 93 days.

Notable examples include Pangkal Pinang with a 224-day period, Kotamadya Kendari and Kabupaten Kendari with 167 days and 152 days respectively. Similarly the majority of PDAM had collection efficiencies of less than 70%.

#### **2.2.8.1 WET Accounts Receivable Recommendations**

WET recommended that each PDAM re-examine its collection policies and procedures, and adopt a target of 30 days for its accounts receivable turnover. Immediate implementation of these measures was strongly recommended, and the majority of PDAM agreed to begin implementing these measures.

WET also observed that penalties for delays in payment were generally very low. Charges for delayed payment were in many cases Rp. 1,000 or less. For business and other large consumers, the low penalty encouraged rather than discouraged late payment. WET recommended that penalties be increased significantly to encourage consumers to pay on time. Penalties are also flat fees and not a percentage of the outstanding receivable. For large consumers, relatively low penalties represent a very inexpensive loan.

Further, it was rare to find PDAM disconnecting continued offenders. WET recommended that customers with outstanding amounts due in excess of 90 days be shut-off and that reconnection fees include both payment of amounts due plus a substantial reconnection charge.

Lastly, WET observed that Government offices and local military compounds generally had the worst payment records. While WET understands the sensitive nature of collecting from these institutions, local officials must be apprised of the damage they are doing to PDAM.

WET also observed that several PDAM did not have computerized billing systems and these were advised to invest in a computerized system.

## 2.9 Summary

Between June and December 1999, WET reviewed the financial condition of 38 PDAM and issued Field Reports for each PDAM. Unfortunately, WET was unable to thoroughly review 3 PDAM because we were not provided with sufficient financial and technical information. With the information available WET determined that 25 of the 38 PDAM required further WET assistance. For those PDAM where WET offered further assistance, WET made a second visit to discuss the results of its Reports. This resulted in a total of 64 visits for the 38 PDAM.

While the financial condition and performance of each PDAM varies from critical to borderline, all 38 PDAM are in poor condition, and their ability to deliver an essential public service diminishes daily. Many communities are not well served by their water utility because their PDAM is unable to continue financing on-going operations or rather PEMDA is unable to subsidize the operation.

This state of affairs is the result of to a greater or lesser degree of all the maladies WET described above. These problems, particularly high idle capacity, NRW, maintenance, and the low tariff regime, all contribute to the poor service and financial distress observed in all 38 PDAM.

As a result the level of service – the availability of piped water 24 hours per day - has been severely reduced or simply shut-off. In addition, the quality of treated water produced may pose a public health hazard.

PDAM production equipment is in such poor conditions that the ability of PDAM to improve and expand services, and raise water quality standards is impossible without repairing or replacing this equipment. Presently, many PDAM can not afford to pay PLN for their electricity let alone repair or replace production assets or reactivate household connections.

More significantly, is that senior managers are either not aware of the magnitude of their problems or unable to effect changes to correct them. One of the most significant needs that WET has identified is improving the skills and quality of staff at PDAM to identify problems and effect solutions.

Second, WET is aware of the low pay scales at most PDAM. There appears to be no incentive for PDAM managers and employees to initiate changes to improve PDAM performance. In order for PDAM staff and managers to be responsive to improving performance, increasing coverage and servicing the community, incentive structures must be reformed to reward good performance and penalize substandard performance. Without emphasis on incentives and pay scales that encourage professionalism improvements in performance will be difficult to say the least. In addition to pay scales, greater employee motivation and job satisfaction will improve performance and garner respect for PDAM staff. Clearly, all PDAM must offer better training for their staff as well as rationalize how to improve staff motivation.

### 3.0 CONTINUING ACTIVITIES

WET Technical Assistance has been successful in analyzing 38 PDAM, and preparing workout plans for 25 PDAM located throughout Indonesia. While WET's efforts had previously been focused on identifying those PDAM that needed to be incorporated into the World Bank financed PDAM Rescue Program, that program has now been postponed indefinitely.

WET understands that the World Bank was unable to proceed with that program because the Ministry of Finance has been unable to reschedule the existing debt of PDAM. The debt rescheduling was one of the principle criteria for new loans to PDAM to allow them to work out of their current problems.

Despite postponement of World Bank funding, much remains and can be done to bring many of the PDAM back to financial health. The principle problem for most PDAM is their management's lack of business skills and professional capability. While the symptoms of the problem are manifested as described above, it is clear that most PDAM senior staff do not possess the business acumen nor the training to address these ills.

The cure, in the opinion of the WET team, is to increase skills at PDAM in both management capability and technical knowledge. Further, to assist in the development of planning tools that will allow PDAM to justify both new investments and tariff increases. Finally, to train PDAM to act independently to justify incurring new debt, increasing their ability to pay, increasing their creditworthiness, developing incentive structures for all employees and motivate a creative and enthusiastic work force.

Below, the WET team describes the methodology for accomplishing these goals. WET believes that by selecting several PDAM that have demonstrated a commitment to reform, a willingness on the part of its management, local government support and demonstrated ability to return to solvency is the best way to demonstrate WET's methodology.

WET plans to select 12 PDAM to include in the WET-3 program. Each of the 12 PDAM will receive training, planning development assistance, financing assistance and monitoring support. To encourage sustainability, WET will work closely with Perpamsi to identify superior managers. These superior managers are expected to make up a core of Perpamsi staff that will continue the program of training and financing support for the future.

#### 3.1 Selection of PDAM

WET believes that by selecting 12 PDAM from the population examined, WET will be able to provide demonstration projects to finance, reform and finally place on an independent footing PDAM that have in the past experienced financial difficulties. Each PDAM will receive training, assistance in developing their own business and financing plan and continuing monitoring assistance to allow them to become independent business units, with strong incentives and professional management. WET's methodology is as follows.

Each of the three WET field teams will select 4 PDAM from the WET I-II group of 54 PDAM visited. Selection will be based on a number of criteria to which a specific rating score will be applied. Seven criteria have been identified and include:

- the demand profile of the community and level of affordability,
- the quality of PDAM management,
- access to financing,
- technical status and potential opportunities,
- current tariffs,
- status of current debt and financial potential, and
- status of political environment

A copy of the selection criteria and scoring is provided in Appendix III.

The 12 PDAM selected for further WET assistance and their respective WET field team are:

<b>WET Team A</b>	<b>WET Team B</b>	<b>WET Team C</b>
PDAM Jember PDAM Asahan PDAM Belitung PDAM Pekalongan	PDAM Sawah Lunto PDAM Kendari PDAM Tuban PDAM Karangasem	PDAM Lampung Tengah PDAM Batang PDAM Jombang PDAM Hulu Sungai Tengah

### 3.2 Training

Training activities for the selected PDAM must and shall be carefully planned. The essence of the training will be to enhance skills in management, finance, water operations, and customer service. Training activities must be markedly different from previous exercises. In the past, training participants were only expected to attend and not demonstrate that they had learned the material presented.

Management training is so critical to the increased performance of each PDAM that we can no longer afford the luxury of not testing participant's competency and increase in knowledge. Training programs will be developed that include a set curriculum, homework and testing of retention. The program is also a method of determining the real intent and seriousness of the participants from each of the PDAM in improving their skills. It is also intended to provide feedback on the quality of the training program and trainers.

WET will develop the training programs and Perpamsi is expected to be the repository of the programs. WET staff will initially conduct the training. Sustainability will be the responsibility of Perpamsi however. The best students from the training activities will likely make up the core of future trainers in this activity.

Training will cover three basic areas, consisting of:

- Management improvement

- Financial management and project financing
- Technical and operator training

Management improvement is intended to increase management capability in areas such as understanding finance, employer/employee relations and planning. WET expects to be tasked with developing separate training activities such as:

1. Accounting for non-accounting managers.
2. Employee development and relations.
3. Capital budgeting
4. Demand and development planning

Financial management techniques shall focus on improved skills in budgeting, financial planning, capital budgeting and project financing. The emphasis of the program shall be to encourage PDAM financial managers to assist their decision making process with well thought out programs and supporting data. The course curriculum that would likely be developed includes:

1. Capital budgeting
2. Budgeting and planning
3. Project financing techniques

The final training activity shall be targeted at improving the technical competency of on-site personnel. The activities envisaged will provide the basis for a certification program aimed at making water plant and distribution operators both technically competent and knowledgeable of their tasks. While this activity may be more comprehensive than resources that might be available some of the training activities envisaged include:

1. Water treatment plant design basics
2. Preparation of standard operating procedures
3. Preparation of standard maintenance procedures
4. Distribution systems and unaccounted for water
5. Site safety procedures

Implementing training will require development of materials, selecting trainers, training of trainers and finally dissemination of the training program. WET anticipates utilizing some internal resources for development but the majority of resources would need to be obtained through external procurement.

WET's internal staff activities would likely encompass assisting in both the classroom training and then follow-on On-The-Job (OJT) type training. WET has determined that the most effective methods for training will include the OJT and then further testing. WET anticipates that with OJT, a further testing cycle would take place. This would test to determine if competency improved with OJT.

### 3.3 Business Plans

WET plans to assist the twelve selected PDAM to formulate and develop their own business plans. These plans will be used by PDAM to obtain finance, define the goals and mission of the PDAM but not reflect policy statements. Unlike a complete Corporate Plan, a business plan is devised to obtain project finance and inform the lender of the project it will be financing and the cash flow stream that will be generated to repay the debt borrowed plus interest.

WET also believes that all PDAM must adopt and employ full cost recovery mechanisms for their respective organizations. WET also believes that each PDAM must assume full responsibility for all expenditures incurred by their respective organizations, and manage their organizations in the most cost-effective manner.

Each business plan will reflect this philosophy and will also be tailored to the specific needs of the subject PDAM, and predicated on demand management. Each plan will cover a defined financing period and consist of set of annual targets concentrating for example, on improving customer service and financial performance through expanded service coverage, tariff adjustments, performance improvements, and reductions in NRW.

It is important to note that each business plan will not be a “set of policy statements”, but rather detail very specific tasks for meeting the desired goals and objectives of the PDAM. Each plan will also consist of a set of supporting financial information, including pro forma for the period(s) identified. In so doing, prospective financiers will be able to determine the business intent of the PDAM and determine the targets that need to be monitored for repayment.

Initially, WET will incorporate the previously developed workout plan for each PDAM into the proposed business plan. This effort shall constitute Year I-II of the business plan, and monitor the implementation of these activities. Subsequent years shall be developed following a prescribed format to achieved stated goals.

Working closely with Perpamsi, PUOD and the respective PDAM, WET will also convey and solicit support from Badan Pengawas members and local government officials, including the Bupati and Walikota for improving the management and financial performance of their respective water utility.

The final product for each of the 12 selected PDAM will be a five-year Corporate Business Plan that will enable each to develop, as appropriate:

- new water sources,
- transmission and distribution systems,
- reservoir storage,
- service coverage,
- meter maintenance and replacement programs,
- service levels,
- customer service program,
- tariffs and financing

WET envisions monthly and quarterly financial and technical monitoring, and quarterly reports to lenders. WET expects that annual preparation of these reports to lenders will act as a planning and management tool that will allow PDAM to become more self-reliant, financially stronger and improve the level of autonomy within each organization.

WET believes that this strategy will also enable the PDAM to address key issues such as:

- overbuilt supply – this has resulted in a serious imbalance of resources and financial losses to PDAM and their respective local governments,
- consumer distrust of PDAM – local governments have been afraid to increase tariffs fearing a backlash from customers for having to pay more for a bloated inefficient administration with no improvement in service,
- misunderstanding of PDAM finances – local officials believe that as long as PDAM has cash available it is solvent and requested “dividends” from the PDAM. They have not fully understood the concept of planning for debt repayment and maintenance. PDAM Managers usually do not make multiple-year plans or set aside reserves for asset replacement and debt repayment. Loans from the central government were often treated as grants.
- upward accountability – access to “easy money” from donors through the central government. Current tariffs cover less than 60% of the total cost of operations, including maintenance, depreciation and debt. PDAMs are relying on central government funds to balance their cash flows.

Now that local governments have full responsibility for their PDAM and are accountable to their respective constituencies, WET believes that one criteria consumers will be using to judge their local government’s performance will be based on the level and quality of the service provided by PDAM.

WET believes that by formulating business plans focused on customer preferences and demand management, a PDAM will be in a better position to justify rate increases with PEMDA and slowly gain a level of self-autonomy for their organization.

WET also believes that developing business plans in the manner described, will also prepare and assist each PDAM to evolve into a truly public utility.

Monitoring activities are intended to ensure compliance with the program of assistance and assure lenders. WET feels that a Report Card on PDAM’s achievements will be a valuable method of reinforcing the program. Also, the Ministry of Finance will benefit from the information that WET gathers on PDAM’s ability to repay its debt. Clearly, if a business plan incorporating a workout plan is put into effect for an insolvent debtor, the creditor must monitor progress toward meeting the goals of the workout plan. WET believes that it has a vital role to play in this activity.

Finally, to ensure an effective program, the results must have sustainability. WET believes that this will be achieved through training of PDAM staff. The training activities previously described above detail the types of training needs that WET recognized.

### 3.4 Funding

Current funding will be exhausted by April 2000. Recognizing the essential role WET is playing in the decentralization process and service delivery, USAID is considering additional funding. The additional activities described above anticipate further funding. If this funding does not materialize, the project will end once the funds are exhausted. If funds can be realized, achievement of the programs and training indicated above will offer great benefits for the survival of all PDAM in Indonesia. Furthermore, WET expects that Indonesia will see more professional, better-managed and more profitable PDAM in the future.

## 4.0 REPORTING

In the Inception Report, WET described the reporting regime to include training activities, business plans and a Final Report. This Interim Report replaces the Final Report described in the Inception Report.

WET will continue to report its activities after each field visit in the form of a Field Trip Report. Future Reports will also include the Business Plans, training programs and a Final Report. The nature and timing of each will depend on funds as they become available. Revisions to the timing and nature of reports will be advised if new funds are provided along with further scopes of work.

**APPENDIX I**  
**STATISTICS ON 38 PDAM**

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APPENDIX I  
STATISTICAL INFORMATION FROM PDAM VISITS

WET - II PROJECT  
Statistics for PDAM Visited

Statistic	PDAM Kabupaten Dati II										Sub Total (17 - 26)	
	Kab.Asahan	Tj. Balai	Kod.Kendari	Kab.Kendari	Kab.Lampung	Kab. Lamteng	Png.Pinang	Belitung	Musi Rw.	Muara E.		
	17	18	19	20	21	22	23	24	25	26		
Month	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	
Population	250,139	116,569	177,718	357,100	562,698	460,438	132,000	140,000	607,519	699,518		3,503,699
<b>Technical Information</b>												
Water Source	River/DW	River	River	River	Riv,DW,Spr.	River, DW	Kolong	Kolong	River	River		
Flow System	Pumping	Pumping	Pumping	Pumping	Pump.+ Grav	pumping	Grav/Pump	Pumping	Pumping	Pumping		
Coverage	34%	58%	39%	4%	12%	32%	23%	14%	8%	10%		17.53%
Connection	14,009	10,266	12,722	1,800	6,543	14,191	5,400	3,331	10,076	9,821		88,159
Capacity ( LPS )	85	215	212	53	203	295	83	105	143	179		1,572
Idle Capacity [%]	42%	42%	0%	31%	44%	72%	30%	62%	11%	6%		35.65%
NRW	20%	23%	44%	39%	31%	42%	50%	50%	32%	31%		35.73%
<b>Income Statement</b>												
Operating Ratio	81%	87%	95%	80%	44%	40%	51%	55%	53%	68%		65.40%
Staff/Connec. (1.000)	9	8	12	22	20	14	11	17	16	6		14
Average Tariff	549	731	781	759	622	669	773	531	438	894		675
Avg Cost Before Depr. & Interest	492	653	654	531	870	920	808	653	746	1,037		736
Avg Cost After Dep. & Before Int.	739	817	900	950	1413	1639	1,087	1,038	1120	2,117		1,182
Avg Cost After Deprec. & Interest	770	842	900	950	1,466	1,643	1,235	1,038	1,120	2,137		1,210
Oper cost/Total cost	70%	67%	62%	56%	61%	55%	78%	68%	41%	61%		61.90%
Admin cost/Total Cost	30%	33%	38%	44%	39%	45%	22%	32%	59%	39%		38.10%
Non-Sales/Total Rev.	13%	15%	16%	9%	7%	15%	8%	7%	25%	6%		12.10%
<b>Balance Sheet</b>												
Acc. Receivable/Days	100	61	167	152	126	98	224	112	169	75		128
Current Ratio	7.18	0.83	1.78	3.07	7.00	1.20	0.25	1.86	0.60	4.26		2.80
Long Term Debt (Rp. Billion)	3.80	1.80	12.31	-	3.70	3.20	3.40	1.60	3.54	0.33		33.67
Debt to Equity		28%	92%	0%	47%	28%	68%	0%	32.00%	2.07%		
Debt Coverage	2.27	2.32	0	0	0	0	0	0	0	6.3		
<b>Project Information</b>												
Project Cost (Million Rp.)	762	NYA	928	1,047	1,313	3,046	2,455	1,937	1,377	NA		12,865
Man-days work	8,000	NYA	8,247	8,894	4,321	19,727	16,000	14,024	11,967	NA		91,180
New Connections	1,000	NYA	1,583	1,745	1,870	4,425	4,400	2,750	2,300	NA		20,073
People Assisted	6,000	NYA	9,498	10,470	11,220	26,550	26,400	16,500	13,800	NA		120,438

1st Visit	06/23-24/99	06/21-22/99	06/23-24/99	06/21-22/99	06/23-24/99	06/21-22/99	07/05-06/99	07/07-08/99	07/12-13/99	07/14-15/99	
2nd Visit	08/30-31/99	NFA	08/30-31/99	09/01-02/99	08/30-31/99	09/01-02/99	09/06-07/99	09/07-08/99	NFA	NFA	
Project Status											

NFA = No Further Assistance

## APPENDIX I

## WET -II PROJECT

## Statistics for PDAM Visited

Statistic	PDAM Kabupaten Dati II									Sub Total (27 - 33)	Grand Total (17 - 33)	
	Blitar	Jombang	Aceh Bsr.	Darau Aceh	Bungo Tebo	Sako	Pamekasan	Sampang	Pekalongan			
	27	28	0	0	29	30	31	32	33			
Month	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98		
Population	121,580	402,524			450,304	351,308	665,870	196,013	150,521		2,187,599	5,691,298
<b>Technical Information</b>												
Water Source	DW	DW + Spring			River	river	DW + Spring	DW + Spring	DW			
Flow System	Pump+Grav	Pump+Grav			Pumping	pumping	pumping	pumping	Grav+Pump.			
Coverage	29%	29%			9%	12%	16%	21%	10%		18.25%	17.81%
Connection	8,052	9,262			5,539	5,604	6,302	7,783	2,566		45,108	133,267
Capacity [LPS]	126	190			167.5	126	208.5	174	57.5		882	2,453
Idle Capacity [%]	60%	45%			36%	31%	54%	40%	43%		52.90%	41.85%
NRW	40%	36%			35%	22%	21%	45%	26%		38.74%	36.81%
<b>Income Statement</b>												
Operating Ratio	37%	40%			103%	98%	87%	73%	60%		71.14%	68.27%
Staff/Connec. (1.000)	19	6			13	11	22	16	18		15	14
Average Tariff	587	405			816	856	554	332	388		563	619
Avg Cost Before Depr. & Interest	707	361					437	368	427		329	532
Avg Cost After Dep. & Before Int.	1,138	769					632	480	764		540	861
Avg Cost After Deprec. & Interest	1,554	1,019			822	962	835	480	764		919	1,065
Oper cost/Total cost	45%	35%			79%	61%	67%	57%	76%		60%	61%
Admin cost/Total Cost	55%	65%			21%	39%	33%	43%	24%		40%	39%
Non-Sales/Total Rev.	9%	15%			3%	15%	5%	16%	4%		10%	11%
<b>Balance Sheet</b>												
Acc. Receivable/Days	104	50			61	84	90	102	136		90	109
Current Ratio	1.34	0.60			1.54	23.41	1.3	2.8	3.31		1.34	2.07
Long Term Debt (Rp. Billion)	3.10	4.70			9.54	4.50	2.8	0	0.5		25.1	58.8
Debt to Equity	134%	60%			595%	94%	92%	NA	29%			
Debt Coverage	-	-			-	-	0	0	0			
<b>Project Information</b>												
Project Cost (Million Rp.)	920	872			2,198	631	1,505	1990	1,293		9,409	22,274
Man-days work	4,750	6,610			13,750	4,482	8,963	4830	8,750		52,135	143,315
New Connections	1,000	1,870			4,000	1,130	2,050	1,900	2,500		14,450	34,523
People Assisted	6,000	11,220			24,000	6,780	12,300	11,400	15,000		86,700	207,138
<b>1st Visit</b>	07/12-13/99	07/14-15/99	Canceled		08/02-03/99	08/04-05/99	08/02-03/99	08/04-05/99	06/14-16/99			
<b>2nd Visit</b>	09/06-07/99	09/07-08/99	Canceled		09/13-14/99	09/14-15/99	NFA	NFA	08/23-24/99			
<b>Project Status</b>												

NFA = No Further Assistance

APPENDIX I  
 STATISTICAL INFORMATION FROM PDAM VISITS

**WET - III PROJECT**  
**Statistics for PDAM Visited**

Statistic	PDAM Kabupaten Dati II											Sub Total (34 - 44)	
	Kab. Banjar	Amuntai	Gorontalo	Limboto	Kapuas	Barabai	Wajo	Sinjai	Lahat	B.Asin	Binjai		
	34	35	36	37	38	39	40	41	42	43	44		
Month	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Dec. 1998	Dec. 1998	Dec. 1998	Dec. 1998	Dec. 1998	Dec. 1998	Dec. 1998	Dec. 1998	
Population	168,240	134,833	133,433	672,003		216,657		44,297	638,580	521,403	699,518	3,228,964	
<b>Technical Information</b>													
Water Source	River	River	River	River	River	River	River	Spring+River	River	River	River, DW		
Flow System	Pumping	Pumping	Pumping	Pumping	Pumping	pumping	Grav/Pump	Grav/Pump	Pumping	Pumping	Pumping		
Coverage	27%	46%	66%	6%	27%	22%	45%	42%	20%	4%	26%	20%	
Connection	9,141	7,717	10,972	5,978	9,707	4,324	3,600	3,734	8,644	3,897	6,541	74,255	
Capacity ( LPS )	145	115	238	222	187	78	90	123	225	97	172	1,691	
Idle Capacity (%)	8%	0%	60%	74%	36%	48%	40%	54%	15%	17%	0%	34%	
NRW	40%	31%	20%	48%	26%	33%	35%	32%	30%	25%	37%	32%	
<b>Income Statement</b>													
Operating Ratio	79%	79%	78%	83%	60%	34%	51%	97%	88%	77%	27%	69%	
Staff/Connec. (1.000)	10	6	10	18	10	14	8	11	14	26	10	12	
Average Tariff /M3	803	677	878	714	721	685	743	815	1039	416	618	737	
Avg Cost /M3 before Deprec.& Int	816	833	981	852	735	817	699	606	1,180	615	726	805	
Avg Cost /M3 after Deprec.& Before Int	1,240	1,252	1,276	NA	1,212	2,015	1,194	753	NA	NA	1,487	948	
Avg Cost /M3 after Deprec.& Interest	1,285	1,252	1,357	852	1,212	2,015	1,437	1,165	1,180	615	1,522	1,263	
Oper cost/Total cost	63%	76%	51%	58%	57%	60%	81%	67%	51%	67%	60%	63%	
Admin cost/Total Cost	37%	24%	49%	42%	43%	40%	19%	33%	49%	33%	40%	37%	
Non-Sales/Total Rev.	18%	25%	7%	5%	16%	8%	28%	37%	12%	12%	36%	19%	
<b>Balance Sheet</b>													
Acc. Receivable/Days	62	36	56	121	39	60	127	32	115	67	85	73	
Current Ratio	7.77	110.35	6.59	3.28	2.00	1.11	5.00	0.66	0.95	0.79	0.68	13	
Long Term Debt (Rp. Billion)	4.40	-	4.58	-	-	0.00	1.70	1.32	1.46	-	10.40	23.9	
Debt to Equity	76%	1%	88%	0%	0%	0%	79%	24%	0.00%	0.00%	0%	24%	
Debt Coverage	4.00	0.00	-	-	-	-	-	3.6	0	0	0		
<b>Project Information</b>													
Project Cost (Million Rp.)	2,636	1,519	1,761	756	924	887		1,526				10,008	
Man-days work	15,060	8,400	6,032	2,966	7,049	6,683		4,300				50,490	
New Connections	4,000	2,400	2,616	1,258	772	1,075		2,000				14,121	
People Assisted	20,000	12,000	15,696	7,548	4,632	6,450		12,000				78,326	
<b>1st Visit</b>	10/12-14/99	10/12-13/99	10/12-13/99	10/12-13/99	10/12-14/99	10/12-13/99		12/01-02/99	12/01-02/99	12/14-15/99			
<b>2nd Visit</b>													
<b>Project Status</b>													

NFA = No Further Assistance

APPENDIX I  
STATISTICAL INFORMATION FROM PDAM VISITS

WET -III PROJECT  
Statistics for PDAM Visited

Statistic	PDAM Kabupaten Dati II										Sub Total (45 - 54)	Grand Total (34 - 54)	
	P. Siantar	Biak	K. Asem	Tanah Laut	Solok	P. Panjang	S. Lunto	Bengkulu S	T. Pinang	T. Uban			
	45	46	47	48	49	50	51	52	53	54			
Month	Decem.98	Decem.98	Decem.98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98	Decem. 98		
Population	631,682	60,681	202,700	30,178	45,684	39,057	55,150	27,534	108,233	30,710		1,231,609	4,460,573
<b>Technical Information</b>													
Water Source	Spring	DW + Spring	DW + Spring	River, DW	Spring+River	Spring	River	DW + Spring	River	River, Spring			
Flow System	Pump&Grav	Pumpung	Gravity	Pump&Grav	Grav./Pump.	Grav./Pump.	Grav./Pump.	pumping	Pump&Grav	Pump&Grav			
Coverage	11%	33%	30%	21%	56%	65%	29%	9%	45%	50%		24%	21%
Connection	13,897	3,300	12,162	3,141	4,293	4,224	2,390	4,632	9,741	3,071		57,780	132,035
Capacity [LPS]	258	104	244	86	90	72	105	227	190	68		1,375	3,065
Idle Capacity (%)	50%	50%	35%	23%	14%	20%	74%	45%				36%	35%
NRW	39%	21%	38%	25%	20%	21%	33%	40%	60%	35%		39%	35%
<b>Income Statement</b>													
Operating Ratio	85%	56%	72%	47%	95%	85%	76%	50%	47%	56%		61%	65%
Staff/Connec. (1.000)	24	11	13	10	10	9	13	11	11	15		11	12
Average Tariff	632	859	459	465	652	542	469	483	1,561	1,013		612	675
Avg Cost /M3 before Deprec. & Int	743	550	404	442	475	428	532	648	1,725	829		595	
Avg Cost /M3 after Deprec.& Before Int	1,130	1,546	726	1,021	688	453	884	1228	2,368	1,822		1,004	
Avg Cost /M3 after Deprec.& Interest	1,424	1,546	726	1,021	688	640	894	1228	3,284	1,822		1,145	1,204
Oper cost/Total cost	35%	65%	74%	78%	60%	53%	55%	57%	64%	49%		54%	58%
Admin cost/Total Cost	65%	35%	26%	22%	40%	47%	45%	43%	36%	51%		36%	37%
Non-Sales/Total Rev.	19%	13%	28%	4%	18%	16%	16%	24%	5%	16%		14%	16%
<b>Balance Sheet</b>													
Acc. Receivable/Days	56	230	72	167	52	76	30	84	99	67		87	80
Current Ratio	1.11	1.53	2.44	6.02	0.94	1.12	2.89	2.9	4.03	6.48		2	7
Long Term Debt (Rp. Billion)	6.80	4.30	1.87	-	0.33	1.84	0.859	6.6	11.9	0		34.5	58.4
Debt to Equity	100%	23%	14%	0%	19%	145%	37%	85%	90%	0%		51%	38%
Debt Coverage	-	-	-	-	-	5.5	0	0	0	0			
<b>Project Information</b>													
Project Cost (Million Rp.)	1,954	150	704	281	915	206	651					4,861	14,870
Man-days work	11,795	6,000	2714	1,417			1,889					23,815	74,305
New Connections	1,695	3,000	1154	200	1,500		870					8,419	22,540
People Assisted	10,170	18,000	6,924	1,200	9,000		5,220					50,514	128,840
<b>1st Visit</b>		12/02-04/99	11/16-18/99	11/17-18/99	11/01-02/99	11/01-02/99	11/01-02/99	11/29-30/99					
<b>2nd Visit</b>													
<b>Project Status</b>													

NFA = No Further Assistance

## **APPENDIX II**

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### **PDAM BANYUASIN TARIFF SCHEDULE**



## SEKRETARIAT WILAYAH / DAERAH

Jalan Kolonel Wahid Udin Lingk. VII No. 257 Telp. 321013 - 321064  
SEKAYU - ( 30711)

Sekayu, 11 Januari 2000

Nomor : 188.342/ 0028 /IV/2000  
Sifat : Penting  
Lampiran : 7 berkas  
Perihal : Penyampaian Peraturan  
Daerah Kabupaten Musi  
Banyuasin .

Kepada  
Yth. Sdr. Kepala Dinas Pendapatan Daerah  
Kabupaten Musi Banyuasin

di -

S e k a y u

Sehubungan dengan ditetapkannya Peraturan Daerah Kabupaten Musi Banyuasin tentang Retribusi Daerah yang telah mendapat persetujuan DPRD Kabupaten Musi Banyuasin, maka dengan ini disampaikan sebanyak 7 buah Peraturan Daerah seperti tersebut dibawah ini yaitu :

1. Peraturan Daerah Kabupaten Musi Banyuasin Nomor 17 Tahun 1999 tentang Retribusi Pemakaian Kekayaan Daerah, yang telah kami undangkan dalam Lembaran Daerah Kabupaten Musi Banyuasin Tahun 1999 Nomor 26 Tanggal 22 Desember 1999.
2. Peraturan Daerah Kabupaten Musi Banyuasin Nomor 18 Tahun 1999 tentang Retribusi Pasar, yang telah kami undangkan dalam Lembaran Daerah Kabupaten Musi Banyuasin Tahun 1999 Nomor 27 Tanggal 22 Desember 1999.
3. Peraturan Daerah Kabupaten Musi Banyuasin Nomor 19 Tahun 1999 tentang Retribusi Pelayanan Persampahan / Kebersihan, yang telah kami undangkan dalam Lembaran Daerah Kabupaten Musi Banyuasin Tahun 1999 Nomor 28 Tanggal 22 Desember 1999.
4. Peraturan Daerah Kabupaten Musi Banyuasin Nomor 20 Tahun 1999 tentang Retribusi Air Bersih, yang telah kami undangkan dalam Lembaran Daerah Kabupaten Musi Banyuasin Tahun 1999 Nomor 29 Tanggal 22 Desember 1999.
5. Peraturan Daerah Kabupaten Musi Banyuasin Nomor 21 Tahun 1999 tentang Retribusi Pergantian Biaya Cetak Peta, yang telah kami undangkan dalam Lembaran Daerah Kabupaten Musi Banyuasin Tahun 1999 Nomor 30 Tanggal 22 Desember 1999.
6. Peraturan Daerah Kabupaten Musi Banyuasin Nomor 22 Tahun 1999 tentang Retribusi Pemeriksaan Alat Pemadam Kebakaran, yang telah kami undangkan dalam Lembaran Daerah Kabupaten Musi Banyuasin Tahun 1999 Nomor 31 Tanggal 22 Desember 1999.

7. Peraturan Daerah Kabupaten Musi Banyuasin Nomor 23 Tahun 1999 tentang Retribusi Pelayanan Kesehatan, yang telah kami undang dalam Lembaran Daerah Kabupaten Musi Banyuasin Tahun 1999 Nomor 32 Tanggal 22 Desember 1999.

Demikianlah kiranya untuk dapat saudara laksanakan sebagaimana mestinya.

An. BUPATI MUSI BANYUASIN  
SEKRETARIS DAERAH KABUPATEN  
SETWIL  
  
I. H. ALEX NOERDIN, S.H.  
Pembina Tingkat I  
NIP. 440 018 477

Tembusan :

1. Yth. Sdr. Kepala Dinas Pekerjaan Umum Kab.Muba.
2. Yth. Sdr. Kepala Dinas Pengelolaan Pasar Kab.Muba.
3. Yth. Sdr. Kepala Dinas Kesehatan Kab.Muba.
4. Yth. Sdr. Kepala Kantor Badan Pertanahan Nasional Kab.Muba.
5. Yth. Sdr. Kamawil Hansip Kab.Muba.
6. Yth. Sdr. Dirut PDAM Kab.Muba.
7. Yth. Sdr. Kabag Umum Setda Kab.Muba.

PERATURAN DAERAH KABUPATEN MUSI BANYUASIN

NOMOR 20 TAHUN 1999

TENTANG

RETRIBUSI AIR BERSIH

DENGAN RAHMAT TUHAN YANG MAHA ESA

BUPATI KABUPATEN MUSI BANYUASIN

- Menimbang :
- a. bahwa dengan telah ditetapkannya Keputusan Menteri Dalam Negeri Nomor 119 Tahun 1998 tentang Ruang Lingkup dan Jenis-Jenis Retribusi Daerah Tingkat I dan Daerah Tingkat II, maka Retribusi Air Bersih merupakan jenis Retribusi Daerah Tingkat II;
  - b. bahwa untuk memungut retribusi sebagaimana dimaksud pada huruf a, perlu diatur dan ditetapkan dengan Peraturan Daerah Kabupaten Musi Banyuasin.
- Mengingat :
1. Undang-Undang Nomor 28 Tahun 1959 tentang Pembentukan Daerah Tingkat II dan Kotapraja di Sumatera Selatan ( Lembaran Negara Republik Indonesia Tahun 1959 Nomor 73, Tambahan Lembaran Negara Republik Indonesia Nomor 1821 );
  2. Undang-Undang Nomor 49 Prp Tahun 1960 tentang Panitia Urusan Piutang Negara ( Lembaran Negara Republik Indonesia Tahun 1960 Nomor 156, Tambahan Lembaran Negara Republik Indonesia Nomor 2104 );
  3. Undang-Undang Nomor 8 Tahun 1981 tentang Hukum Acara Pidana ( Lembaran Negara Republik Indonesia Tahun 1981 Nomor 76, Tambahan Lembaran Negara Republik Indonesia Nomor 3209 );
  4. Undang-Undang Nomor 18 Tahun 1997 tentang Pajak Daerah dan Retribusi Daerah ( Lembaran Negara Republik Indonesia Tahun 1997 Nomor 41, Tambahan Lembaran Negara Republik Indonesia Nomor 3685 );
  5. Undang-undang Nomor 23 Tahun 1997 tentang Pengelolaan Lingkungan Hidup ( Lembaran Negara Republik Indonesia Tahun 1997 Nomor 68, Tambahan Lembaran Negara Republik Indonesia Nomor 3699 );
  6. Undang-Undang Nomor 22 tahun 1999 tentang Pemerintahan Daerah ( Lembaran Negara Republik Indonesia Tahun 1999 Nomor 60, Tambahan Lembaran Negara Republik Indonesia Nomor 3839 );
  7. Peraturan Pemerintah Nomor 27 Tahun 1983 tentang Pelaksanaan Undang-Undang Nomor 8 Tahun 1981 tentang Hukum Acara Pidana ( Lembaran Negara Republik Indonesia Tahun 1983 Nomor 6, Tambahan Lembaran Negara Republik Indonesia Nomor 3258 );

8. Peraturan Pemerintah Nomor 20 Tahun 1997 tentang Retribusi Daerah ( Lembaran Negara Republik Indonesia Tahun 1997 Nomor 55, Tambahan Lembaran Negara Republik Indonesia Nomor 3692 );
9. Peraturan Menteri Dalam Negeri Nomor 4 Tahun 1997 tentang Penyidik Pegawai Negeri Sipil di Lingkungan Pemerintah Daerah;
10. Keputusan Menteri Dalam Negeri Nomor 84 Tahun 1993 tentang Bentuk Peraturan Daerah dan Peraturan Daerah Perubahan;
11. Keputusan Menteri Dalam Negeri Nomor 171 Tahun 1997 tentang Prosedur Pengesahan Peraturan Daerah tentang Pajak Daerah dan Retribusi Daerah;
12. Keputusan Menteri Dalam Negeri Nomor 174 Tahun 1997 tentang Pedoman Tata Cara Pemungutan Retribusi Daerah;
13. Keputusan Menteri Dalam Negeri Nomor 175 Tahun 1997 tentang Tata Cara Pemeriksaan di Bidang Retribusi Daerah;
14. Keputusan Menteri Dalam Negeri Nomor 119 Tahun 1998 tentang Ruang Lingkup dan Jenis-Jenis Retribusi Daerah Tingkat I dan Daerah Tingkat II;
15. Keputusan Menteri Dalam Negeri Nomor 147 Tahun 1998 tentang Komponen Penetapan Tarif Retribusi.

**Dengan Persetujuan Dewan Perwakilan Rakyat Daerah Kabupaten Musi Banyuasin.**

## M E M U T U S K A N

Menetapkan : PERATURAN DAERAH KABUPATEN MUSI BANYUASIN TENTANG RETRIBUSI AIR BERSIH.

### B A B I

#### K E T E N T U A N U M U M

##### P a s a l 1

Dalam Peraturan Daerah ini yang dimaksud dengan :

- a. Daerah adalah Kabupaten Musi Banyuasin;
- b. Pemerintah Daerah adalah Kepala Daerah beserta perangkat Daerah Otonom yang lain sebagai Badan Eksekutif Daerah;

- d. Pejabat adalah Pegawai yang diberi tugas tertentu di bidang Retribusi Daerah sesuai dengan peraturan perundang-undangan yang berlaku;
- e. Badan adalah suatu bentuk badan usaha yang meliputi perseroan terbatas, perseroan komanditer, perseroan lainnya, badan usaha milik negara atau daerah dengan nama atau bentuk apapun, persekutuan, perkumpulan, firma, kongsi, koperasi, yayasan atau organisasi yang sejenis, lembaga, dana pensiun, bentuk usaha tetap serta bentuk usaha lainnya;
- f. Retribusi Jasa Umum adalah retribusi atas jasa yang disediakan atau diberikan oleh Pemerintah Daerah untuk tujuan kepentingan dan kemanfaatan umum serta dapat dinikmati oleh orang pribadi atau badan;
- g. Retribusi Air Bersih yang selanjutnya dapat disebut retribusi adalah pembayaran atas pelayanan penyediaan fasilitas air bersih yang dimiliki atau dikelola langsung oleh Pemerintah Daerah.;
- h. Air bersih adalah air yang digunakan untuk keperluan sehari-hari yang kualitasnya memenuhi syarat kesehatan dan dapat diminum apabila telah dimasak;
- i. Masa Retribusi adalah suatu jangka waktu tertentu yang merupakan batasan bagi wajib retribusi untuk memanfaatkan jasa pelayanan fasilitas air bersih yang dimiliki atau dikelola oleh Pemerintah Daerah;
- j. Wajib Retribusi adalah orang pribadi atau badan yang menurut peraturan perundang-undangan retribusi Daerah diwajibkan untuk melakukan pembayaran retribusi Daerah;
- k. Surat Pendaftaran Objek Retribusi Daerah yang selanjutnya dapat disingkat SpdORD, adalah surat yang digunakan oleh wajib retribusi untuk melaporkan data objek retribusi dan wajib retribusi sebagai dasar penghitungan dan pembayaran retribusi yang terutang menurut peraturan perundang-undangan retribusi Daerah;
- l. Surat Ketetapan Retribusi Daerah yang selanjutnya dapat disingkat SKRD adalah Surat Keputusan yang menentukan besarnya jumlah retribusi yang terutang;
- m. Surat Ketetapan Retribusi Daerah Kurang Bayar Tambahan, yang selanjutnya dapat disingkat SKRDKBT, adalah surat keputusan yang menentukan tambahan atas jumlah retribusi yang telah ditetapkan;
- n. Surat Ketetapan Retribusi Daerah Lebih Bayar, yang selanjutnya dapat disingkat SKRDLB, adalah surat keputusan yang menentukan jumlah kelebihan pembayaran retribusi karena jumlah kredit retribusi lebih besar daripada retribusi yang terutang atau tidak seharusnya terutang;
- o. Surat Tagihan Retribusi Daerah, yang selanjutnya dapat disingkat STRD adalah surat untuk melakukan tagihan retribusi dan atau sanksi administrasi berupa bunga dan atau denda;

p. Surat Keputusan .....

- p. Surat Keputusan Keberatan adalah surat keputusan atas keberatan terhadap SKRD atau dokumen lain yang dipersamakan, SKRDKBT dan SKRDKB yang diajukan oleh Wajib Retribusi;
- q. Pemeriksaan adalah serangkaian kegiatan untuk mencari, mengumpulkan dan mengelola data dan atau keterangan lainnya dalam rangka pengawasan kepatuhan pemenuhan kewajiban retribusi berdasarkan peraturan perundang-undangan retribusi Daerah;
- r. Penyidikan Tindak Pidana di Bidang Retribusi Daerah adalah serangkaian tindakan yang dilakukan oleh Penyidik Pegawai Negeri Sipil yang selanjutnya dapat disebut Penyidik, untuk mencari serta mengumpulkan bukti yang dengan bukti itu membuat terang tindak pidana di bidang retribusi daerah serta menemukan tersangkanya;
- s. Surat Ketetapan Retribusi Daerah Kurang Bayar untuk selanjutnya di singkat SKRDKB adalah Surat Keputusan yang menentukan besarnya jumlah retribusi yang terutang, jumlah kredit retribusi, jumlah pembayaran, jumlah kekurangan pembayaran, pembayaran pokok retribusi, besarnya sanksi administrasi dan jumlah yang masih harus dibayar.

## BAB II

### NAMA, OBJEK DAN SUBJEK RETRIBUSI

#### Pasal 2

Dengan nama Retribusi Air Bersih dipungut retribusi sebagai pembayaran atas pelayanan penyediaan fasilitas air bersih.

#### Pasal 3

- (1) Objek Retribusi adalah pelayanan penyediaan fasilitas air bersih yang dimiliki dan atau dikelola langsung oleh Pemerintah Daerah.
- (2) Dikecualikan dari objek retribusi adalah pelayanan penyediaan yang dimiliki dan atau dikelola oleh pihak swasta.

#### Pasal 4

Subjek Retribusi adalah orang pribadi atau badan yang memperoleh pelayanan penyediaan fasilitas air bersih.

## BAB III

### GOLONGAN RETRIBUSI

#### Pasal 5

Retribusi Air Bersih digolongkan sebagai Retribusi Jasa Umum.

## BAB IV

## BAB IV

### CARA MENGUKUR TINGKAT PENGGUNAAN JASA

#### Pasal 6

- (1) Tingkat penggunaan jasa dihitung berdasarkan volume air dikalikan dengan klasifikasi pelanggan;
- (2) Klasifikasi penggunaan air sebagaimana dimaksud pada ayat (1) pasal ini ditetapkan sebagai berikut:
  - Sosial
  - Non Niaga
  - Niaga
  - Industri
  - Khusus

## BAB V

### PRINSIP DAN SASARAN DALAM PENETAPAN STRUKTUR DAN BESARNYA TARIF

#### Pasal 7

- (1) Prinsip dan sasaran penetapan tarif adalah untuk menutup sebagian biaya penyelenggaraan pelayanan dengan memperhatikan kemampuan masyarakat dan aspek keadilan;
- (2) Biaya sebagaimana dimaksud pada ayat (1) pasal ini meliputi biaya sumber air, biaya pengolahan air, biaya transmisi dan distribusi, biaya umum dan administrasi, dan biaya penyusutan.

## BAB VI

### STRUKTUR DAN BESARNYA TARIF

#### Pasal 8

- (1) Struktur tarif digolongkan berdasarkan kemampuan masyarakat, jenis pelayanan yang diberikan dan volume air yang dipakai;
- (2) Struktur dan besarnya tarif Retribusi Air Bersih sebagaimana dimaksud pada ayat (1) pasal ini adalah:

JENIS TARIF PELANGGAN UNTUK KOTA SEDANG DAN KECIL

GOLONGAN/KLASIFIKASI PELANGGAN	KLASIFIKASI KONSUMSI AIR			
	0-10 M <sup>3</sup>	11-10 M <sup>3</sup>	21-30 M <sup>3</sup>	DIATAS 30 M <sup>3</sup>
	Rp./ M <sup>3</sup>	Rp./ M <sup>3</sup>	Rp./ M <sup>3</sup>	Rp./ M <sup>3</sup>
I. <b>SOSIAL</b> <i>General</i>				
1. Sosial Umum	300	300	300	300
2. Sosial Khusus <i>Special</i>	300	400	550	700
II. <b>NON NIAGA</b> <i>Small</i>				
1. Rumah Tangga A. <i>250</i>	400	550	800	1100
2. Rumah Tangga B. <i>200</i>	350	500	750	900
III. <b>NIAGA</b> <i>Small</i>				
1. Niaga Kecil	750	750	1500	1500
2. Niaga Besar	1100	1100	2200	2200
IV. <b>INDUSTRI</b> <i>Small</i>				
1. Industri Kecil	1200	1200	2400	2400
2. Industri Besar	1500	1500	3000	3000
V. <b>KHUSUS</b> <i>Special</i>				
1. Pelabuhan dan Usaha Sejenisnya	6000	6000	6000	6000

I. PENGGOLONGAN PELANGGAN

1. **SOSIAL**

a. Sosial Umum

- Hydrant Umum - *fire hydrant*
- Tempat Ibadah - *MOSQUE - masjid*

b. Sosial Khusus

- Asrama Badan Sosial - *Asrama Sosial Indonesia*

2. **NON NIAGA**

a. Rumah Tangga A

- Rumah Tangga Menengah Keatas - *Medis - ↑*
- Instansi Pemerintah - *Govt*
- Sekolah/Perguruan - *School*
- Rumah Sakit/Puskesmas dan Klinik Pemerintah - *Hospital*

b. Rumah Tangga B

- Rumah Tangga Menengah Kebawah - *Medis ↓*

### 3. NIAGA

#### a. Niaga Kecil

- Kios Warung
- Bengkel Kecil
- Usaha Kecil yang berada dalam Rumah Tangga
- Warung Kopi
- Rumah Sakit Swasta
- Politeknik/laboratorium Swasta
- Tempat Pemangkas Rambut
- Hotel/Losmen
- Percetakan
- Apotik
- Toko

#### b. Niaga Besar

- Hotel/Restoran
- Steam bath/Salon Kecantikan/Panti Pijat
- Night Club/Bar
- Bank/BUMN/BUMD
- Service/Station Bengkel Besar.

### 4. INDUSTRI

#### a. Industri Kecil

#### b. Industri Besar

- Pabrik Es
- Pabrik Makanan dan Minuman
- Pabrik Kimia Obat-obatan
- Pabrik, Gudang Pendingin
- Pabrik Tekstil
- Pergudangan dan Industri lainnya

### 5. KHUSUS

- Pelabuhan dan usaha sejenisnya

## II. PEMAKAIAN AIR MINIMUM PERBULAN

Bagi pelanggan aktif dikenakan pemakaian minimum perbulan sesuai dengan Golongan/Klasifikasi pelanggan sebagai berikut :

a. Golongan	01	Sosial Umum	yaitu	: 30 M <sup>3</sup>	= Rp. 11.500,-
b. Golongan	02	Sosial Khusus	yaitu	: 15 M <sup>3</sup>	= Rp. 7.500,-
c. Golongan	03	Non Niaga A	yaitu	: 15 M <sup>3</sup>	= Rp. 9.250,-
d. Golongan	04	Non Niaga B	yaitu	: 15 M <sup>3</sup>	= Rp. 8.500,-
e. Golongan	05	Niaga Kecil	yaitu	: 25 M <sup>3</sup>	= Rp. 25.000,-
f. Golongan	06	Niaga Besar	yaitu	: 25 M <sup>3</sup>	= Rp. 35.500,-
g. Golongan	07	Industri Kecil	yaitu	: 30 M <sup>3</sup>	= Rp. 50.500,-
h. Golongan	08	Industri Besar	yaitu	: 30 M <sup>3</sup>	= Rp. 62.500,-

III. BIAYA PEMELIHARAAN METER AIR PERBULAN PER-PELANGGAN  
DISESUAIKAN DENGAN UKURAN METER AIR YANG TERPASANG SBB :

1.	Meter air diameter 1/2"	dikenakan	Rp.	1.500,-
2.	Meter air diameter 3/4"	dikenakan	Rp.	2.000,-
3.	Meter air diameter 1"	dikenakan	Rp.	2.500,-
4.	Meter air diameter 1.1/2"	dikenakan	Rp.	3.500,-
5.	Meter air diameter 2"	dikenakan	Rp.	6.500,-
6.	Meter air diameter 3"	dikenakan	Rp.	10.000,-
7.	Meter air diameter 4"	dikenakan	Rp.	15.000,-

IV. BIAYA ADMINISTRASI REKENING PER-BULAN ADALAH :

1.	Rekening Biasa per-rekening	Rp.	1.000,-
2.	Rekening Khusus per-rekening	Rp.	7.500,-

V. SANKSI / DENDA

3. Pembayaran Rekening air paling lambat tanggal 15 setiap bulan, apabila keterlambatan membayar dikenakan denda sesuai dengan jangka waktu sbb :
  - a. Dari tanggal 16 s/d akhir bulan berjalan dikenakan denda Rp. 1.000,-
  - b. Keterlambatan 1 ( satu ) bulan dikenakan denda ..... Rp. 2.500,-
  - c. Keterlambatan 2 ( dua ) bulan dikenakan denda ..... Rp. 5.000,-
  - d. Keterlambatan sampai dengan 3 ( tiga ) bulan berturut-turut, maka sambungan air akan diputuskan sementara.
4. Pengambilan air sebelum meteran atau dengan sengaja menghambat lajunya angka meter dikenakan Denda sesuai klasifikasi pelanggan sbb :
  - a. Pelabuhan atau usaha sejenisnya ..... Rp. 250.000,-
  - b. Industri ..... Rp. 250.000,-
  - c. Ni a g a ..... Rp. 100.000,-
  - d. Non Niaga / Rumah Tangga ..... Rp. 50.000,-
  - e. S o s i a l ..... Rp. 30.000,-
  - f. Disamping denda tersebut diatas pelanggan juga dikenakan denda pemakaian air sebanyak 50 M<sup>3</sup> pada bulan yang bersangkutan.

VI. BIAYA ADMINISTRASI PELANGGAN PER-KEGIATAN:

5.	Biaya Penyambungan Kembali (setelah pemutusan sementara )	Rp.	15.000,-
6.	Biaya M u t a s i .....	Rp.	20.000,-
7.	Biaya Balik Nama .....	Rp.	20.000,-

VII. BIAYA SAMBUNGAN BARU :

8. Biaya Sambungan baru pelanggan disesuaikan dengan harga bahan dan upah pada saat pemasangan yang didukung dengan Rencana Anggaran Biaya (RAB)
9. Biaya Pendaftaran sambungan baru ..... Rp. 3.000,-
10. Biaya Perencanaan ..... Rp. 5.000,-

11. Biaya Pembuatan Plat PDAM ..... Rp. 3.000,-
12. Biaya Jaminan Langganan sebesar 3 X tarif minimum Rekening untuk golongan industri dan 2 X tarif minimum rekening untuk golongan sosial dan niaga.

## BAB VII

### WILAYAH PEMUNGUTAN

#### Pasal 9

Retribusi yang terutang dipungut di wilayah Daerah tempat pelayanan penyediaan fasilitas air bersih diberikan.

## BAB VIII

### MASA RETRIBUSI DAN SAAT RETRIBUSI TERUTANG

#### Pasal 10

Masa retribusi adalah jangka waktu yang lamanya 1 (satu) bulan.

#### Pasal 11

Saat retribusi terutang adalah pada saat ditetapkannya SKRD atau dokumen lain yang dipersamakan.

## BAB IX

### SURAT PENDAFTARAN

#### Pasal 12

- (1) Wajib Retribusi diwajibkan mengisi SPdORD;
- (2) SPdORD sebagaimana dimaksud pada ayat (1) pasal ini harus diisi dengan jelas, benar dan lengkap serta ditanda tangani oleh Wajib Retribusi atau kuasanya;
- (3) Bentuk, isi, serta tata cara pengisian dan penyampaian SPdORD sebagaimana dimaksud pada ayat (1) pasal ini ditetapkan oleh Kepala Daerah.

## BAB X

### PENETAPAN RETRIBUSI

#### Pasal 13

- (1) Berdasarkan SPdORD sebagaimana dimaksud dalam Pasal 12 ayat (1) Peraturan Daerah ini ditetapkan retribusi terutang dengan menerbitkan SKRD atau dokumen lain yang dipersamakan;
- (2) Bentuk, isi, dan tata cara penerbitan dan penyampaian SKRD atau dokumen lain yang dipersamakan sebagaimana dimaksud pada ayat (1) pasal ini ditetapkan oleh Kepala Daerah.
- (3) Apabila berdasarkan hasil pemeriksaan dan ditemukan data baru dan atau data yang semula belum terungkap yang menyebabkan penambahan jumlah retribusi yang terutang, maka dikeluarkan SKRDKBT;

## BAB XI

### TATA CARA PEMUNGUTAN

#### Pasal 14

- (1) Pemungutan retribusi tidak dapat diborongkan;
- (2) Retribusi dipungut dengan menggunakan SKRD atau dokumen lain yang dipersamakan.

## BAB XII

### SANKSI ADMINISTRASI

#### Pasal 15

Dalam hal Wajib Retribusi tidak membayar tepat pada waktunya atau kurang membayar, dikenakan sanksi administrasi berupa bunga sebesar 2 % ( dua persen ) setiap bulan dari retribusi yang terutang atau kurang bayar dan ditagih dengan menggunakan STRD.

## BAB XIII

### TATA CARA PEMBAYARAN

#### Pasal 16

- (1) Retribusi yang terutang harus dilunasi sekaligus untuk 1 (satu) bulan;
- (2) Retribusi yang terutang dilunasi selambat-lambatnya 15 (lima belas) hari sejak diterbitkannya SKRD atau dokumen lain yang dipersamakan;
- (3) Tata cara pembayaran, penyetoran, tempat pembayaran retribusi diatur dengan Keputusan Kepala Daerah.

## BAB XIV

### TATA CARA PENAGIHAN

#### Pasal 17

- (1) Retribusi terutang berdasarkan SKRD atau dokumen lain yang dipersamakan SKRDKBT, STRD dan Surat Keputusan Keberatan yang menyebabkan jumlah retribusi yang harus dibayar bertambah, yang tidak atau kurang bayar oleh Wajib Retribusi dapat ditagih melalui Badan Urusan Piutang dan Lelang Negara (BUPLN);
- (2) Penagihan retribusi melalui BUPLN dilaksanakan berdasarkan peraturan perundangan-undangan yang berlaku.

## BAB XV

### KEBERATAN

#### Pasal 18

- (1) Wajib Retribusi dapat mengajukan keberatan hanya kepada Kepala Daerah atau pejabat yang ditunjuk atas SKRD atau dokumen lain yang dipersamakan, SKRDKBT dan SKRDLB;
- (2) Keberatan diajukan secara tertulis dalam bahasa Indonesia dengan disertai alasan-alasan yang jelas;
- (3) Keberatan harus diajukan dalam jangka waktu paling lama 2 (dua) bulan sejak tanggal SKRD atau dokumen lain yang dipersamakan, SKRDKBT dan SKRDLB diterbitkan, kecuali apabila Wajib Retribusi tertentu dapat menunjukkan bahwa jangka waktu itu tidak dapat dipenuhi karena keadaan diluar kekuasaannya;
- (4) Keberatan yang tidak memenuhi persyaratan sebagaimana dimaksud pada ayat (2) dan (3) pasal ini tidak dianggap sebagai surat keberatan, sehingga tidak dipertimbangkan;
- (5) Pengajuan keberatan tidak menunda kewajiban membayar retribusi dan pelaksanaan penagihan retribusi.

#### Pasal 19

- (1) Kepala Daerah dalam jangka waktu paling lama 6 (enam) bulan sejak tanggal Surat Keberatan diterima harus memberi keputusan atas keberatan yang diajukan;
- (2) Keputusan Kepala Daerah atas keberatan dapat berupa menerima seluruhnya atau sebagian, menolak, atau menambah besarnya retribusi yang terutang.

(3) Apabila.....

## BAB XIV

### TATA CARA PENAGIHAN

#### Pasal 17

- (1) Retribusi terutang berdasarkan SKRD atau dokumen lain yang dipersamakan SKRDKBT, STRD dan Surat Keputusan Keberatan yang menyebabkan jumlah retribusi yang harus dibayar bertambah, yang tidak atau kurang bayar oleh Wajib Retribusi dapat ditagih melalui Badan Urusan Piutang dan Lelang Negara ( BUPLN );
- (2) Penagihan retribusi melalui BUPLN dilaksanakan berdasarkan peraturan perundangan-undangan yang berlaku.

## BAB XV

### KEBERATAN

#### Pasal 18

- (1) Wajib Retribusi dapat mengajukan keberatan hanya kepada Kepala Daerah atau pejabat yang ditunjuk atas SKRD atau dokumen lain yang dipersamakan, SKRDKBT dan SKRDLB;
- (2) Keberatan diajukan secara tertulis dalam bahasa Indonesia dengan disertai alasan-alasan yang jelas;
- (3) Keberatan harus diajukan dalam jangka waktu paling lama 2 (dua) bulan sejak tanggal SKRD atau dokumen lain yang dipersamakan, SKRDKBT dan SKRDLB diterbitkan, kecuali apabila Wajib Retribusi tertentu dapat menunjukkan bahwa jangka waktu itu tidak dapat dipenuhi karena keadaan diluar kekuasaannya;
- (4) Keberatan yang tidak memenuhi persyaratan sebagaimana dimaksud pada ayat (2) dan (3) pasal ini tidak dianggap sebagai surat keberatan, sehingga tidak dipertimbangkan;
- (5) Pengajuan keberatan tidak menunda kewajiban membayar retribusi dan pelaksanaan penagihan retribusi.

#### Pasal 19

- (1) Kepala Daerah dalam jangka waktu paling lama 6 (enam) bulan sejak tanggal Surat Keberatan diterima harus memberi keputusan atas keberatan yang diajukan;
- (2) Keputusan Kepala Daerah atas keberatan dapat berupa menerima seluruhnya atau sebagian, menolak, atau menambah besarnya retribusi yang terutang.

(3) Apabila.....

- (3) Apabila jangka waktu sebagaimana dimaksud pada ayat (1) pasal ini telah lewat dan Kepala Daerah tidak memberikan suatu keputusan, keberatan yang diajukan tersebut dianggap dikabulkan.

## BAB XVI

### PENGEMBALIAN KELEBIHAN PEMBAYARAN

#### Pasal 20

- (1) Atas kelebihan pembayaran retribusi, Wajib Retribusi dapat mengajukan permohonan pengembalian kepada Kepala Daerah;
- (2) Kepala Daerah dalam jangka waktu paling lama 6 (enam) bulan sejak diterimanya permohonan kelebihan pembayaran retribusi sebagaimana dimaksud pada ayat (1) pasal ini, harus memberikan keputusan;
- (3) Apabila jangka waktu sebagaimana dimaksud pada ayat (2) pasal ini telah dilampaui dan Kepala Daerah tidak memberikan suatu keputusan, permohonan pengembalian kelebihan retribusi dianggap dikabulkan dan SKRDLB harus diterbitkan dalam jangka waktu paling lama 1 (satu) bulan;
- (4) Apabila Wajib Retribusi mempunyai utang retribusi lainnya kelebihan pembayaran retribusi sebagaimana dimaksud pada ayat (1) pasal ini langsung diperhitungkan untuk melunasi terlebih dahulu utang retribusi tersebut;
- (5) Pengembalian kelebihan pembayaran retribusi sebagaimana dimaksud pada ayat (1) pasal ini dilakukan dalam jangka waktu paling lama 2 (dua) bulan sejak diterbitkan SKRDLB;
- (6) Apabila pengembalian kelebihan pembayaran retribusi dilakukan setelah lewat jangka waktu 2 (dua) bulan, Kepala Daerah diwajibkan membayar bunga sebesar 2 % (dua persen) sebulan atas keterlambatan pembayaran kelebihan retribusi.

#### Pasal 21

- (1) Permohonan pengembalian kelebihan pembayaran retribusi diajukan secara tertulis kepada Kepala Daerah dengan sekurang-kurangnya menyebutkan :
  - a. Nama dan alamat Wajib Retribusi;
  - b. Masa retribusi;
  - c. Besarnya kelebihan pembayaran;
  - d. Alasan yang singkat dan jelas.
- (2) Permohonan pengembalian kelebihan pembayaran retribusi disampaikan secara langsung atau melalui pos tercatat;

- (3) Bukti penerimaan oleh Pejabat Daerah atau bukti pengiriman pos tercatat merupakan bukti saat permohonan diterima oleh Kepala Daerah.

#### Pasal 22

- (1) Pengembalian kelebihan retribusi dilakukan dengan menerbitkan Surat Perintah membayar kelebihan retribusi;
- (2) Apabila kelebihan pembayaran retribusi diperhitungkan dengan utang retribusi lainnya, sebagaimana dimaksud dalam Pasal 20 ayat (4) Peraturan Daerah ini pembayaran dilakukan dengan cara pemindah bukuan juga berlaku sebagai bukti pembayaran.

### BAB XVII

#### PENGURANGAN, KERINGANAN DAN PEMBEBASAN RETRIBUSI

#### Pasal 23

- (1) Kepala Daerah dapat memberikan pengurangan, keringanan dan pembebasan retribusi;
- (2) Pemberian pengurangan, keringanan, dan pembebasan retribusi sebagaimana dimaksud pada ayat (1) pasal ini dengan memperhatikan kemampuan Wajib Retribusi;
- (3) Tata cara pengurangan, keringanan dan pembebasan retribusi ditetapkan oleh Kepala Daerah.

### BAB XVIII

#### KEDALUWARSA PENAGIHAN

#### Pasal 24

- (1) Hak untuk melakukan penagihan retribusi, kedaluwarsa setelah melampaui jangka waktu 3 (tiga) tahun terhitung sejak saat terutangnya retribusi, kecuali apabila Wajib Retribusi melakukan tindak pidana di bidang retribusi;
- (2) Kedaluwarsa penagihan retribusi sebagaimana dimaksud pada ayat (1) pasal ini tertanggung apabila:
  - a. Diterbitkan Surat Teguran, atau;
  - b. Ada pengakuan utang retribusi dari Wajib Retribusi baik langsung maupun tidak langsung.

## BAB XIX

### KETENTUAN PIDANA

#### Pasal 25

- (1) Wajib Retribusi yang tidak melaksanakan kewajibannya sehingga merugikan keuangan Daerah diancam pidana kurungan paling lama 3 (tiga) bulan atau denda paling banyak 4 (empat) kali jumlah retribusi terutang;
- (2) Tindak pidana yang dimaksud pada ayat (1) pasal ini adalah pelanggaran.

#### Pasal 26

- (1) Dalam jangka waktu 2 (dua) bulan berturut-turut, bila pendistribusian air bersih kepada pelanggan tidak berfungsi selayaknya, Perusahaan Daerah Air Minum dalam hal ini tidak diperkenankan untuk menarik retribusi atau tagihan bulanan kepada pelanggan;
- (2) Penarikan retribusi atau tagihan bulanan kepada pelanggan bisa dilakukan bila pendistribusian air bersih kepada pelanggan berjalan normal kembali.

## BAB XX

### PENYIDIKAN

#### Pasal 27

- (1) Pejabat Pegawai Negeri Sipil tertentu di lingkungan Pemerintah Daerah diberi wewenang khusus sebagai Penyidik untuk melakukan penyidikan tindak pidana di bidang retribusi Daerah sebagaimana dimaksud dalam Undang-Undang Nomor 8 Tahun 1981 tentang Hukum Acara Pidana;
- (2) Wewenang Penyidik sebagaimana dimaksud pada ayat (1) pasal ini adalah:
  - a. Menerima, mencari, mengumpulkan dan meneliti keterangan atau laporan berkenaan dengan tindak pidana di bidang retribusi Daerah agar keterangan atau laporan tersebut menjadi lengkap dan jelas.
  - b. Meneliti, mencari dan mengumpulkan keterangan mengenai orang pribadi atau badan tentang kebenaran perbuatan yang dilakukan sehubungan dengan tindak pidana retribusi Daerah.
  - c. Meminta keterangan dan bahan bukti dari orang pribadi atau badan sehubungan dengan tindak pidana di bidang Retribusi Daerah.

- d. Memeriksa buku-buku, catatan-catatan dan dokumen-dokumen lain berkenaan dengan tindak pidana di bidang Retribusi Daerah;
  - e. Melakukan penggeledahan untuk mendapatkan bahan bukti pembukuan, pencatatan, dan dokumen-dokumen lain, serta melakukan penyitaan terhadap bahan bukti tersebut;
  - f. Meminta bantuan tenaga ahli dalam rangka pelaksanaan tugas penyidikan tindak pidana di bidang Retribusi Daerah;
  - g. Menyuruh berhenti dan atau melarang seseorang meninggalkan ruangan atau tempat pada saat pemeriksaan sedang berlangsung dan memeriksa identitas orang dan atau dokumen yang dibawa sebagaimana dimaksud pada huruf e;
  - h. Memotret seseorang yang berkaitan dengan tindak pidana retribusi Daerah;
  - i. Memanggil orang untuk didengar keterangannya dan diperiksa sebagai tersangka atau saksi;
  - j. Menghentikan penyidikan bila alat bukti tidak mencukupi;
  - k. Melakukan tindakan lain yang perlu untuk kelancaran penyidikan tindak pidana di bidang retribusi daerah menurut hukum yang dapat dipertanggung jawabkan.
- (3) Penyidik sebagaimana dimaksud pada ayat (1) pasal ini memberitahukan dimulainya penyidikan dan menyampaikan hasil penyidikannya kepada Penuntut Umum, sesuai dengan ketentuan yang diatur dalam Undang-Undang Nomor 8 Tahun 1981 tentang Hukum Acara Pidana.

## BAB XXI

### KETENTUAN PENUTUP

#### Pasal 28

Dengan berlakunya Peraturan Daerah ini maka Keputusan Bupati Kepala Daerah Tingkat II Musi Banyuasin Nomor : 177/SK/PDAM/92 tentang Tarif Air Perusahaan Daerah Air Minum Kabupaten Daerah Tingkat II Musi Banyuasin dinyatakan dicabut dan tidak berlaku lagi.

#### Pasal 29

Hal-hal yang belum cukup diatur dalam Peraturan Daerah ini, sepanjang mengenai pelaksanaannya akan diatur lebih lanjut oleh Kepala Daerah.

Peraturan Daerah ini mulai berlaku pada tanggal diundangkan.

Agar supaya setiap orang dapat mengetahuinya, memerintahkan pengundangan Peraturan Daerah ini dengan penempatannya dalam Lembaran Daerah Kabupaten Musi Banyuasin.

Disahkan di Sekayu  
Pada tanggal 22 Desember 1999

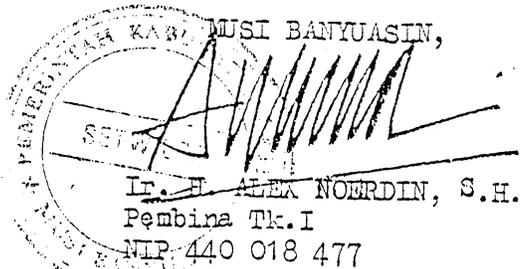
BUPATI KABUPATEN MUSI BANYUASIN,



MUSI  
NURHAWI  
NIK. B - 1694 / D

Diundangkan di Sekayu  
pada tanggal 22 Desember 1999

SEKRETARIS DAERAH KABUPATEN



MUSI BANYUASIN,  
Ir. H. ALEX NOERDIN, S.H.  
Pembina Tk. I  
NIP. 440 018 477

LEMBARAN DAERAH KABUPATEN MUSI BANYUASIN TAHUN 1999 NOMOR 29.

## **APPENDIX III**

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### **CRITERIA FOR SELECTING 12 PDAM**

## Criteria for selecting PDAM

Sample

### PDAM Kabupaten Sampang

Criteria	Weight	Information	Score	Weighted Score (Weight x Score)
Demand Profile/Community Income	4.081	Ground water is bad , has waiting list	5	20.4
Quality of Management	3.673	Direktur Utama is Politician, Dirum has no water business background	3	11.0
Access to Funds	3.265	No fund available from any institutions	1	3.3
Technical Potential/Opportunity	2.857	Need to build trans. Line	3	8.6
Tariff Increase	2.449	Current average tariff is Rp. 700	4	9.8
Financial Potential	2.041	No long term debt outstanding	5	10.2
Positive Political Environmental	1.632	Bupati and DPRD are concerned enough to develop PDAM	5	8.2
Total Weighted Score				71.4

### Scoring Sheet for Selected PDAM Needs Further Assistance

PDAM's criterias for selection	Weight
Demand Profile/Community Income	4.081
Quality of Management	3.673
Access to Funds	3.265
Technical Potential/Opportunity	2.857
Tariff Increase	2.449
Financial Potential	2.041
Positive Political Environmental	1.632

**Notes :**

Criteria score is based upon information available on survey sheet.

Selection Criteria	Score	Information
Demand Profile/Community Income	5	Ground water's quality is bad , high affordability and has waiting list
	4	Ground water's quality is bad and low affordability
	3	Most of Community prefer to PDAM's water
	2	Half of Community prefer to PDAM's water
	1	Most of Community prefer to ground water
Quality of Management	5	All Direkturs have good understanding in water bussiness
	4	Dirut and one of Direkturs have good understanding in water bussiness
	3	Dirtek and Dirum are good - Dirut is not good
	2	Dirtek or Dirum is good
	1	None has good understanding in water bussiness
Access to Funds	5	Fund from on going project available for WET progr.
	4	-
	3	Fund from APBD or BPD or KTDP available
	2	-
	1	No fund available
Technical Potential/Opportunity	5	All trans/distribution lines are ready and has idle capacity
	4	Some trans/distribution lines are ready and has idle capacity
	3	Trans/distribution are not ready and has idle capacity
	2	Trans/distribution are not ready and has no idle capacity
	1	Trans/distribution are ready but has no idle capacity
Tariff Increase	5	Current Avg tariff is < Rp.700 lower than O&M costs
	4	Current Avg tariff is < Rp.700 equal to O&M costs
	3	Current Avg tariff is < Rp.700 higher than O&M costs
	2	Current Avg tariff is > Rp.700 lower than O&M costs
	1	Current Avg tariff is > Rp.700 higher than O&M costs
Financial Potential	5	PDAM has no LTD outstanding
	4	Total outstanding LTD is < Rp. 1 Billion
	3	Total outstanding LTD is Rp. 1 Billion - 3 Billion
	2	Total outstanding LTD is Rp. 3 Billion - 5 Billion
	1	Total outstanding LTD is > Rp. 5 Billion
Positive Political Environmental	5	Bupati and DPRD are supported on PDAM Dev't
	4	-
	3	Only Bupati or DPRD is supported on PDAM Dev't
	2	-
	1	None is supported on PDAM Dev't

PDAM Selection For Making Bussiness Plan

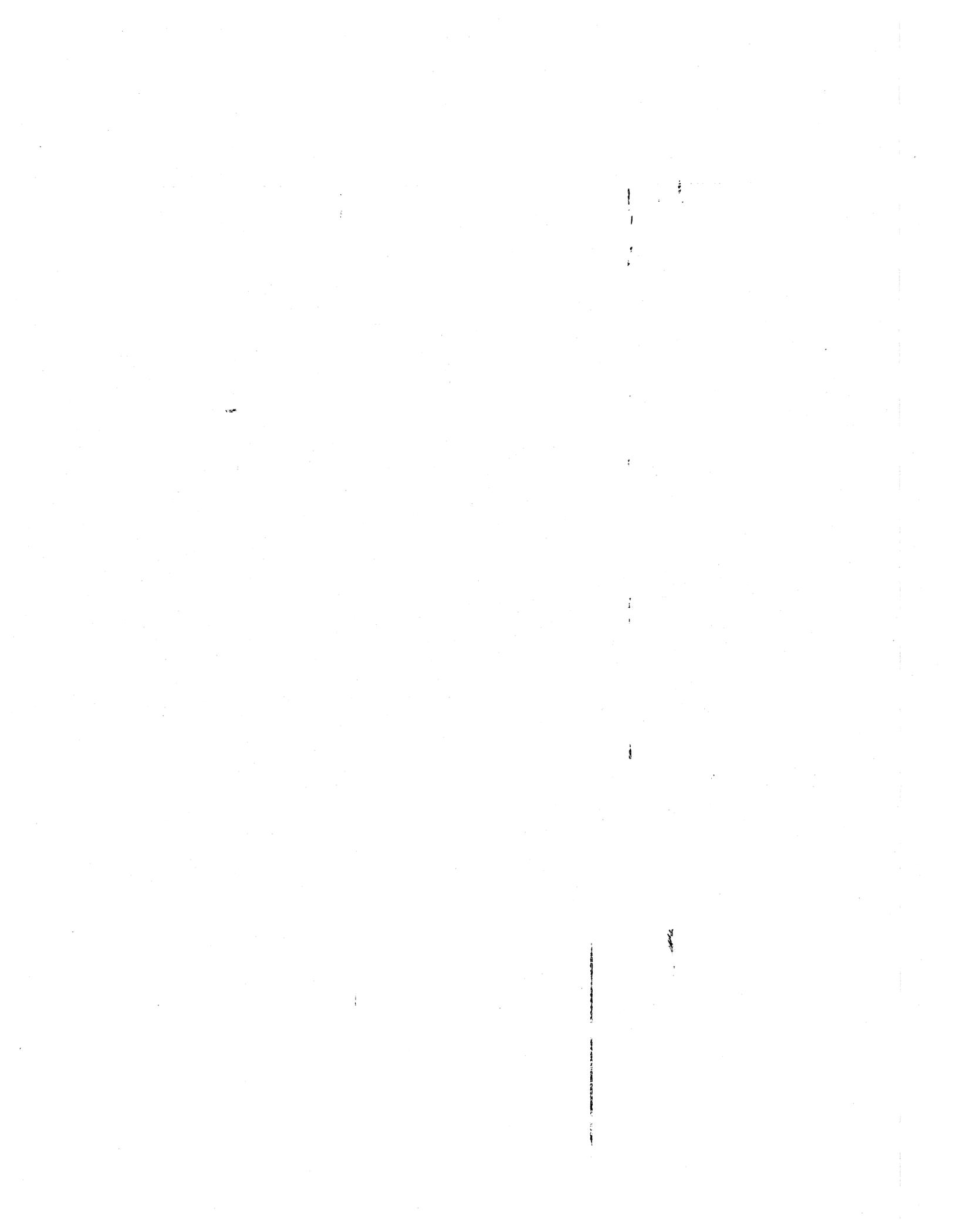
No.	PDAM	Demand Profile			Quality of Managemnt			Access to Fund			Technical Potential			Tariff Increase			Financial Potential			Positive Political Envi.			Grand Total
		Weight	Score	Total	Weight	Score	Total	Weight	Score	Total	Weight	Score	Total	Weight	Score	Total	Weight	Score	Total	Weight	Score	Total	
	<b>WET I</b>																						
1	Jember	4.081	4	16.324	3.673	5	18.365	3.265	5	16.325	2.857	3	8.571	2.449	5	12.245	2.041	3	6.123	1.632	4	6.528	<b>84.481</b>
2	Lamongan	4.081	5	20.405	3.673	4	14.692	3.265	2	6.53	2.857	2	5.714	2.449	4	9.796	2.041	1	2.041	1.632	4	6.528	65.706
3	Pacitan	4.081	4	16.324	3.673	5	18.365	3.265	4	13.06	2.857	2	5.714	2.449	4	9.796	2.041	5	10.205	1.632	5	8.160	<b>81.624</b>
	<b>WET II</b>																						
1	Asahan	4.081	5	20.405	3.673	4	14.692	3.265	5	16.325	2.857	2	5.714	2.449	4	9.796	2.041	5	10.205	1.632	4	6.528	<b>83.665</b>
2	Tanjung Balai	4.081	5	20.405	3.673	5	18.365	3.265	2	6.53	2.857	4	11.428	2.449	4	9.796	2.041	3	6.123	1.632	4	6.528	79.175
3	Pangkal Pinang	4.081	3	12.243	3.673	2	7.346	3.265	2	6.53	2.857	2	5.714	2.449	4	9.796	2.041	2	4.082	1.632	4	6.528	52.239
4	Belitung	4.081	5	20.405	3.673	5	18.365	3.265	4	13.06	2.857	2	5.714	2.449	5	12.245	2.041	4	8.164	1.632	4	6.528	<b>84.481</b>
5	Pekalongan	4.081	5	20.405	3.673	4	14.692	3.265	4	13.06	2.857	2	5.714	2.449	5	12.245	2.041	5	10.205	1.632	5	8.160	<b>84.481</b>
	<b>WET III</b>																						
1	Banjar	4.081	4	16.324	3.673	2	7.346	3.265	2	6.53	2.857	2	5.714	2.449	5	12.245	2.041	2	4.082	1.632	4	6.528	58.769
2	Amuntai	4.081	4	16.324	3.673	5	18.365	3.265	3	9.795	2.857	2	5.714	2.449	4	9.796	2.041	5	10.205	1.632	4	6.528	76.727
3	Sinjai	4.081	5	20.405	3.673	5	18.365	3.265	2	6.53	2.857	2	5.714	2.449	4	9.796	2.041	3	6.123	1.632	4	6.528	73.461
4	Biak	4.081	5	20.405	3.673	5	18.365	3.265	2	6.53	2.857	4	11.428	2.449	5	12.245	2.041	3	6.123	1.632	4	6.528	<b>81.624</b>
5	Tanah laut	4.081	2	8.162	3.673	4	14.692	3.265	2	6.53	2.857	2	5.714	2.449	5	12.245	2.041	5	10.205	1.632	4	6.528	64.076
6	Solok	4.081	2	8.162	3.673	3	11.019	3.265	3	9.795	2.857	3	8.571	2.449	4	9.796	2.041	3	6.123	1.632	4	6.528	59.994
7	Padang Panjan	4.081	2	8.162	3.673	5	18.365	3.265	3	9.795	2.857	2	5.714	2.449	4	9.796	2.041	3	6.123	1.632	5	8.160	66.115

**PDAM Selection For Business Plan (Group G2)**

No.	Criteria : Weight : PDAM	Demand Profile		Quality of Management		Access to Fund		Technical Potential		Tariff Increase		Financial Potential		Positive Political Envi.		Grand Total
		4.081		3.673		3.265		2.857		2.449		2.041		1.632		
		Score	Total	Score	Total	Score	Total	Score	Total	Score	Total	Score	Total	Score	Total	
	<b>WET I</b>															
1	Blora	4	16.324	4	14.692	1	3.265	3	8.571	5	12.245	4	8.164	5	8.160	71.421
2	Gresik	3	12.243	4	14.692	1	3.265	4	11.428	2	4.898	1	2.041	3	4.896	53.463
3	Kulon Progo	3	12.243	4	14.692	1	3.265	4	11.428	5	12.245	5	10.205	5	8.160	<b>72.238</b>
4	Pandeglang	3	12.243	4	14.692	1	3.265	3	8.571	1	2.449	3	6.123	3	4.896	52.239
5	Tegal-Slawi	2	8.162	4	14.692	1	3.265	2	5.714	3	7.347	5	10.205	5	8.160	57.545
6	Tuban	3	12.243	5	18.365	1	3.265	4	11.428	5	12.245	5	10.205	5	8.160	<b>75.911</b>
	<b>WET II</b>															
1	Bungo Tebo	4	16.324	4	14.692	1	3.265	4	11.428	3	7.347	1	2.041	1	1.632	56.729
2	Kendari	3	12.243	4	14.692	1	3.265	5	14.285	5	12.245	1	2.041	5	8.160	66.931
3	Kendari-Unaaha	4	16.324	2	7.346	1	3.265	3	8.571	2	4.898	5	10.205	1	1.632	52.241
4	Muara Enim	2	8.162	3	11.019	1	3.265	3	8.571	3	7.347	4	8.164	5	8.160	54.688
5	Musi Rawas-L. Linggau	3	12.243	2	7.346	1	3.265	3	8.571	2	4.898	2	4.082	1	1.632	42.037
6	Sarko	3	12.243	4	14.692	1	3.265	3	8.571	3	7.347	2	4.082	3	4.896	55.096
	<b>WET III</b>															
1	Bengkulu Selatan-Manna	4	16.324	4	14.692	1	3.265	4	11.428	5	12.245	1	2.041	3	4.896	64.891
2	Gorontalo	3	12.243	4	14.692	1	3.265	4	11.428	2	4.898	2	4.082	3	4.896	55.504
3	Karangasem	5	20.405	4	14.692	1	3.265	4	11.428	5	12.245	3	6.123	5	8.160	<b>76.318</b>
4	Lahat	3	12.243	1	3.673	1	3.265	3	8.571	2	4.898	3	6.123	3	4.896	43.669
5	Limboto	2	8.162	1	3.673	1	3.265	3	8.571	5	12.245	5	10.205	1	1.632	47.753
6	Musi Banyuasin	4	16.324	3	11.019	1	3.265	3	8.571	3	7.347	5	10.205	4	6.528	63.259
7	Sawah Lunto	5	20.405	5	18.365	1	3.265	5	14.285	5	12.245	4	8.164	5	8.160	<b>84.889</b>

SCORING TABLE FOR PDAM CORPORATE PLANNING (Visited By G-3)

No.	PDAM	Demand Profile		Quality of Management		Access to Fund		Technical Potential		Tariff Increase		Financial Potential		Positive Political Env.		Grand Total
		Score	Total	Score	Total	Score	Total	Score	Total	Score	Total	Score	Total	Score	Total	
<b>WET 1</b>																
1	Majalengka	3	12.243	4	14.692	3	9.795	2	5.714	4	9.796	5	10.205	5	8.16	70.6
2	Jepara	5	20.405	1	3.673	1	3.265	2	5.714	4	9.796	3	6.123	3	4.896	53.9
3	Batang	4	16.324	4	14.692	5	16.325	4	11.428	4	9.796	3	6.123	5	8.16	82.8
6	Nganjuk	3	12.243	4	14.692	3	9.795	3	8.571	3	7.347	2	4.082	5	8.16	64.9
<b>WET II</b>																
1	Lampung Utara	5	20.405	1	3.673	3	9.795	3	8.571	2	4.898	3	6.123	4	6.528	60.0
2	Lampung Tengah	5	20.405	4	14.692	3	9.795	4	11.428	2	4.898	3	6.123	5	8.16	75.5
3	Blitar	2	8.162	3	11.019	3	9.795	3	8.571	3	7.347	3	6.123	4	6.528	57.5
4	Jombang	3	12.243	5	18.365	5	16.325	3	8.571	3	7.347	3	6.123	3	4.896	73.9
5	Pamekasan	5	20.405	4	14.692	1	3.265	5	14.285	2	4.898	3	6.123	5	8.16	71.8
6	Sampang	5	20.405	3	11.019	1	3.265	5	14.285	2	4.898	5	10.205	5	8.16	72.2
<b>WET III</b>																
1	Kapuas	3	12.243	5	18.365	3	9.795	2	5.714	2	4.898	5	10.205	5	8.16	69.4
2	Hulu S Tengah	5	20.405	3	11.019	3	9.795	3	8.571	4	9.796	5	10.205	4	6.528	76.3
3	Binjai	2	8.162	3	11.019	1	3.265	2	5.714	2	4.898	1	2.041	3	4.896	40.0
4	Pematang Siantar	3	12.243	3	11.019	1	3.265	2	5.714	3	7.347	2	4.082	3	4.896	48.6
5	Tanah Laut	3	12.243	3	11.019	3	9.795	2	5.714	3	7.347	3	6.123	4	6.528	58.8
6	Tanjung Uban	5	20.405	3	11.019	3	9.795	1	2.857	2	4.898	5	10.205	3	4.896	64.1
7	Tanjung Pinang	5	20.405	2	7.346	2	6.53	3	8.571	1	2.449	1	2.041	5	8.16	55.5



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*in association with*

**Environmental and Management  
Program Support (EUP)**  
United States Agency for  
International Development  
Washington, D.C

**Institute for Public Private Partnerships (IP3)**

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## **PURSE/WET PROJECT**

In December 1991 the U.S. and Indonesian governments signed an agreement to encourage private investment in the provision of public water supply, wastewater treatment and solid waste management services in urban areas throughout the archipelago. In recognizing that its capacity to finance the needed projects is severely strained, and that insufficient urban infrastructure will adversely affect public health and welfare and inhibit future economic growth, the Government has been looking increasingly to the private sector to participate in the provision of these essential services.

PURSE/WET is working with USAID/Indonesia's Office of Urban Environmental Management and several agencies of the Government of Indonesia through a combination of technical assistance and capacity building interventions to :

- develop policy consensus and a legal framework that clarifies current rules and formulates new or revised regulations pertaining to private investment in all aspects of municipal infrastructure development and/or provision of urban services,
- demonstrate the technical and contractual feasibility of various forms of Public-Private Partnerships through demonstration projects, and
- transfer knowledge and expertise to public sector officials in relevant technical, financial and managerial aspects of environmental infrastructure.

For more information on the PURSE/WET Project, please contact Chemonics International or the PURSE/WET Project at the addresses listed above.

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**PURSE / WET PROJECT**  
*Private Participation in Urban Services - Water Efficiency Team*  
*United States Agency for International Development*

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April 10, 2000

**Mr. James Woodcock**  
Project Officer, UEM Office  
USAID/Jakarta  
American Embassy  
Jl. Medan Merdeka Selatan 3-5  
Jakarta 10110

Property of  
Chemonics International  
Home

Subject: **SECOND INTERIM REPORT**

Project: **Water Efficiency Team (WET)**  
**IQC No. PCE-I-00-97-0003-00 Task Order #806**

Dear Mr. Woodcock

Enclosed please find our Second Interim Report for the above entitled Project. As you are aware, WET will be conducting a seminar on Monday April 10, 2000 to discuss the findings of WET to date and to introduce ideas for continued assistance. This report has been written to discuss those activities to date. It further provides statistics on PDAM visited and offers certain conclusions and suggestions for improving the performance of PDAM throughout Indonesia. We further encourage you to read carefully our suggestions for further assistance to PERPAMSI. In particular, the expanded project we suggest fits nicely with PERPAMSI's new training foundation.

I trust you will find our report informative. Should you have any questions, please advise.

Sincerely,  
CHEMONICS INTERNATIONAL INC.

  
**Bennett Parton**  
Chief of Party

cc: John Strattner, Vice President, Chemonics International, Washington, DC  
Rekha Lal, Project Administrator, Chemonics International Washington DC

**PURSE / WET PROJECT**  
*Private Participation in Urban Services - Water Efficiency Team*  
*United States Agency for International Development*

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April 10, 2000

**Prof. Dr. Ir Benny Chatib**  
PERPAMSI  
Jl. Penjernihan II No. 27 B  
Jakarta 10210

Subject:       **SECOND INTERIM REPORT - WET**

Dear Prof. Benny

Enclosed please find our Second Interim Report for the above entitled Project. As you are aware, WET will be conducting a seminar on April 10, 2000 to discuss the contents of this report and to report on the findings and statistical data related to our activities. Further we offer suggestions for expanded activities for WET. We believe these activities fit nicely with PERPAMSI's new training initiatives and will assist many PDAM toward better service and more professional management,

I trust you will find our report informative. Should you have any questions, please advise.

Sincerely,  
Water Efficiency Team

  
**Bennett Parton**  
Chief of Party

cc:     John Strattnr. Vice President, Chemonics International. Washington, DC  
       Rekha Lal, Project Administrator, Chemonics International Washington DC