

Status of Improvement of Water and Sanitation Facilities in Metro Manila

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Before 1997

Water distribution system in Metro Manila was in bad shape

Unregistered connections tapped to the city's aging mainlines were everywhere

Access to water supply by a growing metropolis was spotty, with only a few areas actually experiencing 24-hour supply

And the leaks were all over the place

Untreated domestic water -48% of total BOD pollution

US \$1.3 B -annual economic losses from water pollution -health, fisheries production and tourism

Weak law enforcement due to inadequate resources, poor statistics, institutional fragmentation and weak cooperation between central and LGUs

National Water Crisis Act

- This situation prompted the Philippine government to enact the National Water Crisis Act in 1995, attempting to address the burgeoning population's need for improved water services.

Pragmatic Solution

To turn over the operation of the network to the private sector.

August 1997, the Manila Water Company took over the operation of the East Zone of Metro Manila as agent and contractor of the government-owned Metropolitan Waterworks and Sewerage System under a 25-year concession agreement. Maynilad Water Services, Inc. (MWSI) operates West Zone.

The concession agreement also granted Manila Water Company exclusive rights to the use of land and facilities for the production, treatment and distribution of water, as well as the rights to operate the sewerage system.

Manila Water as Concessionnaire to MWSS

to provide wastewater services that include (1) sewerage and (2) sanitation.

(1) Sewerage service-operation and maintenance of networks of sewer pipes and the Sewage Treatment Plant that treat the wastewater before disposal into water bodies.

(2) Sanitation service - operation and maintenance of vacuum trucks that clean household septic tanks and disposing the collected septage through environment-safe means.

1997-2002 (1st 5 years)

far from smooth sailing as the company was besieged with both internal and external challenges.

currency crisis in 1997

El Niño phenomenon in 1998

arduous arbitration process a little after that

political uncertainties on the national front that increased regulatory pressure on the company

Metro Manila in 2003

12 M people

35.7 % GDP

17 cities and municipalities

65-75% pollution from residential sewage, the rest from industry (tanneries, textile mills, food processing plants, distilleries, chemical and metal plants)

Key water courses –Marikina and Pasig River are biologically dead

90% water supply in MMla

15% connected to sewerage system; half are treated

85 % have septic tanks but poorly constructed, regular servicing only started during MSSP

9,700 diarrhea cases (absence of water supply or sanitation or both)

Liquid wastes rely on open drains

Very few in high development areas have constructed sewers and small sewage treatment plants

Clean Water Act of 2004

To abate, prevent, and control water pollution using a holistic, integrated, decentralized and participatory approach

Projects

Manila Second Sewerage Project (MSSP)
2001-2005

Manila Third Sewerage Project (MTSP)

Manila Second Sewerage Project (MSSP)

to improve wastewater service in Metro
Manila

PhP 1 B

27 new STPs were constructed along with
the rehabilitation older plants including the
Magallanes STP, which at 40 MLD capacity
is the biggest in the country

> 20 newly -procured desludging trucks to
improve sanitation service.

Problems Encountered

Septage was dumped in the ocean on a pilot basis from Oct 2001-July 2002 (9 months) but was discontinued when NGO complained

Concession agreement and 2003 rate rebasing were based on outdated plans (rebasings done every 5 years)

Public has very low awareness on the societal benefits of sewerage and sanitation and were not sympathetic to the disruption caused when retrofitting sewerage

Public's awareness to pay for sewerage and sanitation is low and current tariff structure does not provide sufficient incentive to make dedicated connections to separate sewerage systems

Capacity and experience of concessionaires in sewerage provision is limited.

Recommendations

Recommended that lahar-affected area north of the city be considered as a treated septage disposal site

Master plan using JICA grant financing system

MWCI came up with master plan for the East Zone but didn't consider environmental benefits

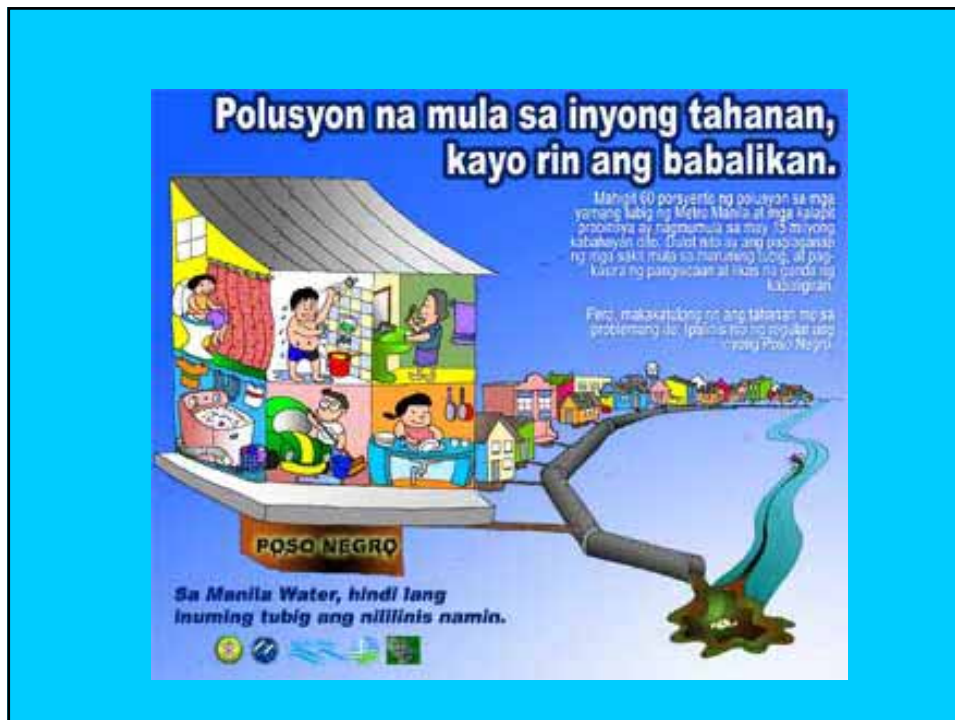
Manila Third Sewerage Project (MTSP)

\$ 85 M (\$ 63 M loan from World Bank)

Objectives of MTSP

to increase the coverage and effectiveness of sewerage service delivery in participating areas of Metro Manila through an integrated approach involving septage management, sewage management, and heightened consumer awareness of water pollution problems and their solutions;

to establish the financial and technical viability of new approaches for sewage management in Metro Manila.



COMPONENTS OF MTSP

10 STPs (increase by 30%)

upgrading of 2 communal septic tanks to secondary treatment, rehabilitation and construction of collection networks;

septage Management which covers 100 vehicles for pumping-out septage from septic tanks (fecal tankers), two septage treatment plants (SPTPs), and safe disposal of treated septage;

institutional strengthening for (a) the carrying out of a public information campaign on the benefits of sewerage and sanitation services, and on the best practices of proper disposal of sewage, and (b) assistance in preparation of follow-up programs for wastewater and sanitation improvements.

BENEFITS OF MTSP

increase sewerage coverage from about 8% to 30%

Increase sanitation services from around 1.5% to 100% in the East concession area

reduction in total domestic BOD load in Manila Water concession area by about 15,400 to 37,700 tones/year

improvements in public health and well-being
The risks of the community coming into contact with raw wastewater are lessened, and the resultant benefit has been estimated at about PhP 300,000 per 1,000 persons/year.

...BENEFITS OF MTSP

reduced risk benefit of people coming in contact with raw wastewater from overflowing septic tanks has been estimated at PhP 150,000 per 1,000 persons/year avoided health costs due to loss indirect income and medical costs

improvement in soil condition and crop yields in lahar-affected areas, where treated septage will be applied;

information on the viability of new approaches for sewage management in Metro Manila.

...BENEFITS OF MTSP

Institutional benefits through improved approaches on sewage management is also expected.

Lessons learned from the project will help improve the design of subsequent investments on sewerage and sanitation that are more socially, economically and politically acceptable.

Opportunities and Limitations of Metro Manila's Concession Agreements

while creating strong incentives for the Concessionaire to act efficiently to meet contractual obligations, a concession arrangement also constrains the responsiveness of a sector because the incentives are focused on the obligations as strictly defined by the contract.

Even when conditions change rapidly, the concession system locks implementation into pre-defined plan, which can only be amended during agreed formal renegotiation periods.

In contrast, a public service provider is often provided greater flexibility, and can take a broader view to refine and revise the implementation plan to meet changing circumstances.

During project preparation, MWCI updated its own sewerage and sanitation master plan, which has led to improvements in the selection of components and design of the project, as well as prospects for improved demonstration effect and environmental benefits from the project investments.

The public's limited willingness to pay for sewerage service has been exacerbated by the design of the tariff within the concession agreements.

Sanitation services are currently supported by a mandatory environmental charge, equal to 10% of the water charge, paid by all water consumers.

A sewerage charge of 50% is levied when a household connects to a separate sewerage system.

MWCI completed 12,000 sewer connections, due to its strategy of strong public consultation; nevertheless, some of the communities dropped out during implementation.

The Institutional Strengthening component of the project supports increasing public awareness of the importance of sewerage and sanitation through a public awareness campaign using the mass media.

To ensure the survival of Manila Water, the company's management realized that the process of transformation must begin internally - through its people.

90% of Manila Water Company's employees were from the former MWSS – proper training and motivation

Empowerment

top management provided general policies and strategic directions

mid-level managers were given a free hand to plan and implement changes in their respective territories

Skilled workers were transformed into knowledge workers

Cross-functional teams called "clusters" were formed in order to assist the management in formulating key policies and decisions as it focused on certain corporate issues

Transformation

Although formal boundaries were in place, the company continues to encourage a "seamless" structure where everyone was free to assist in the corporate programs that may be, strictly speaking, outside of his formal scope of duties and responsibilities.

The company makes sure that everyone is involved, in one way or another, in attaining its overall corporate objectives.

Decentralization Policy

Business areas were further subdivided into smaller and more manageable territorial boundaries in order to allow greater focus and faster response time to customer problems.

Fiscal discipline

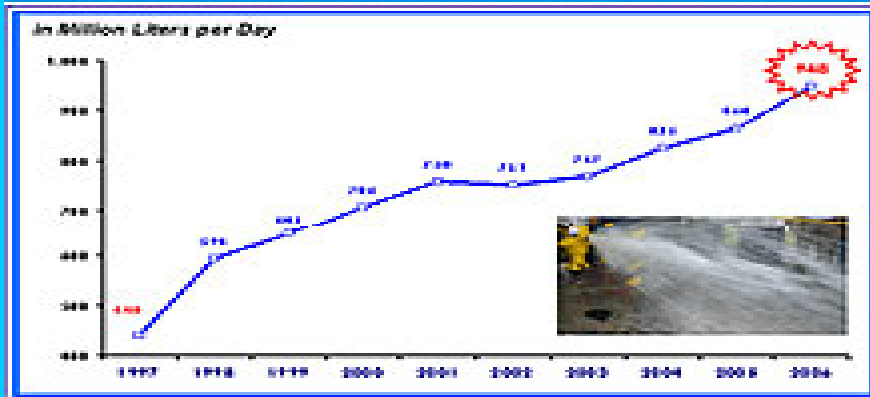
The first few years were the survival years for Manila Water.

Limited loan funding was available at that time, and the company made sure that it maximized the use of its resources.

Projects were implemented through careful planning and prioritization while operating costs were efficiently minimized.

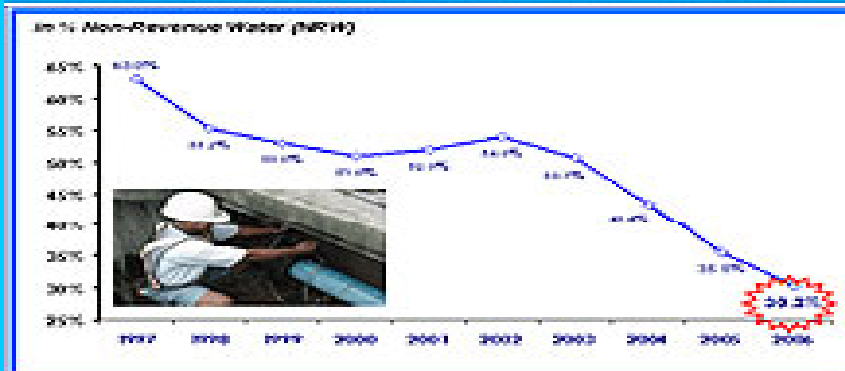
Increase in the volume of water delivered to customers from 440 million liters per day (MLD) to 948 MLD as of December 2006

Sustained Growth in Billed Volume



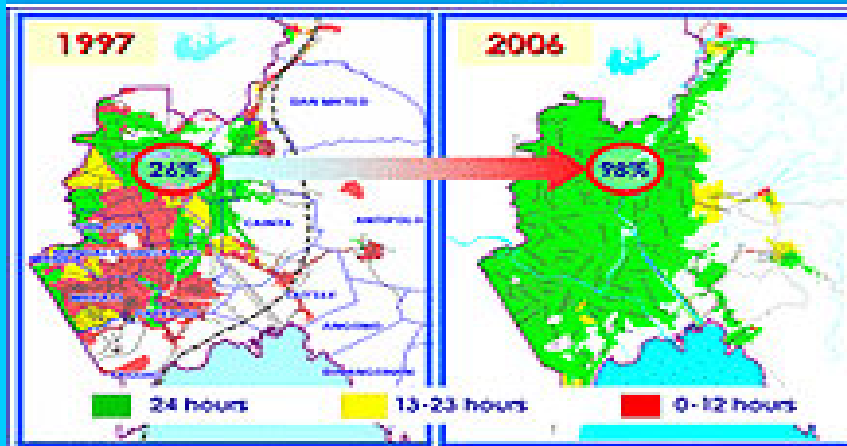
Reduction in water losses (non-revenue water) from 63 % to 30.4 % as of December 2006

Continuous reduction of water losses



Increase in the percentage of customers enjoying 24-hour water availability from 26 % in 1997 to 98 % as of December 2006

Provided 24-hour water supply to Metro Manila



Other notable achievements

Increase in the number of customers served from 2 M to more than 5 M

100 % compliance with water quality standards

Water for the poor from 850,000 to 1 M people

Capital investments from PhP 17.5 to 23 B

1,300 km of new pipelines have been laid out in various areas to improve service delivery and minimize water losses

Other notable achievements

successfully completed the rehabilitation of the WWTP in Magallanes (south of Makati City) which processes up to 40 MLD wastewater

constructed 26 package STPs all over Metro Manila and it continues to offer free desludging services to customers in its territory as part of its community service.

Financial Performance

Favorable net profit for the first time in 2001 (PhP 558 M)

Net income doubled in 2003

Net income in 2005 (PhP 2.01 B)

Its financial record allowed the company to secure favorable financing terms from international financial institutions such as the DEG (German Development Bank), the International Finance Corporation, and the World Bank.

ACCOMPLISHMENTS ARE A TRIBUTE TO

Leadership and vision of its management
1,500 strong force who are now part
owners of the ESOP –Employee Stock
Option Plan
Healthy collaboration with stockholders
(including public sector)

Thank you!!!

