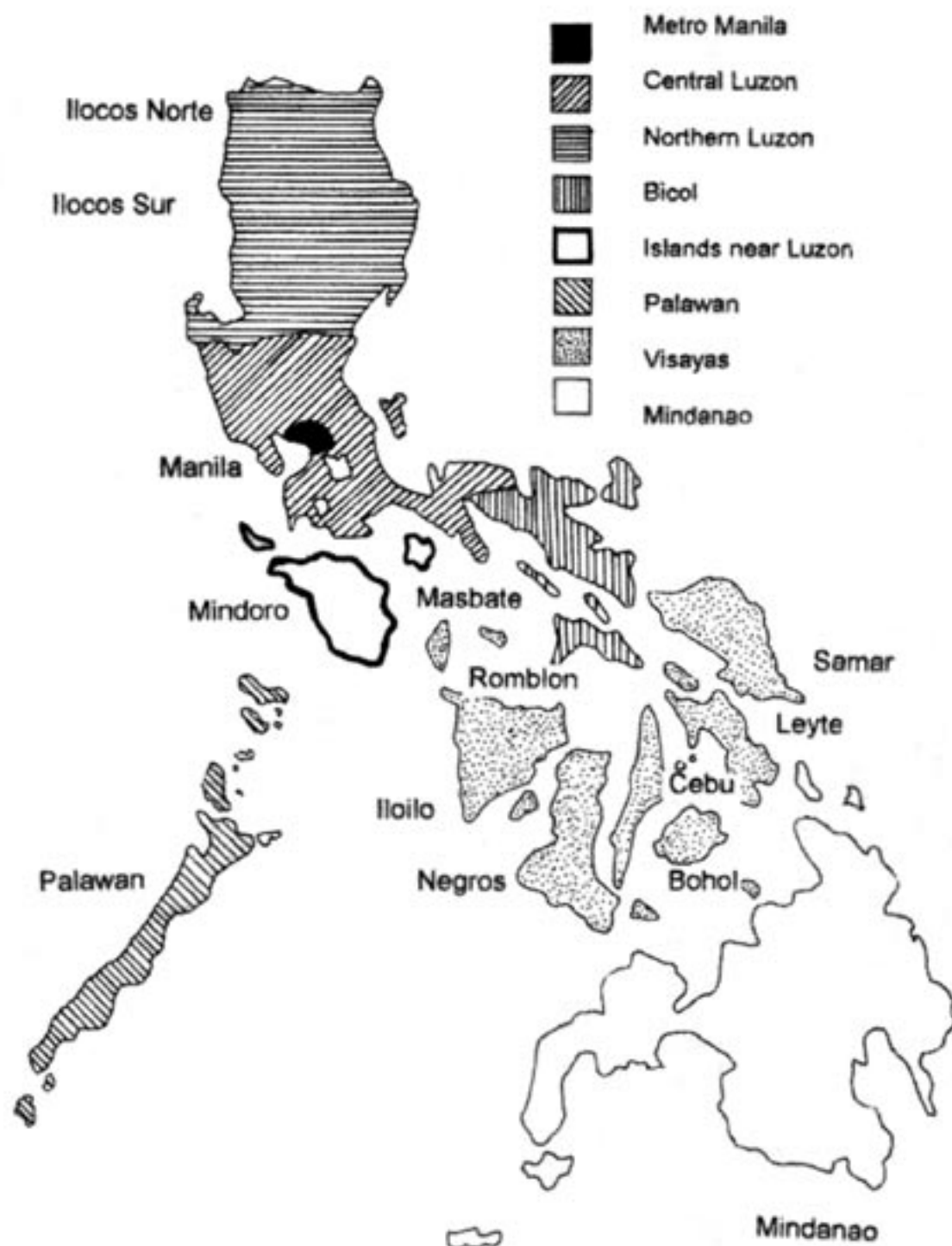


Manila





Manila

Water supply for poor communities: processes to achieve affordability (short and long term)

Manila has to face important water problems because of the huge increase of its population in the last years, especially a continuously increasing poor population. The government, Metro Manila and private enterprises have set up a particularly interesting process in order to create a sustainable and affordable water supply service for all.

*Chair: **Dr. Margarita Garrido**, Director General of the Colombian Institute for Development of Science and Technology Colciencias, PECC Science and Technology Task Force Coordinator, Colombia*
*Discussant: **Dr. Benjamin V. Carino**, General Manager, Public Estates Authority, Metro Manila, Philippines.*

Mrs. Aloha Samoza, Director for Environment and Power, Coordinating Council for Private Sector Participation, representing the Government

Role of the local authorities in the implementation of the public-private partnerships and in the financing decisions: investment and management. Expectations and visions for the future.

Col. Angel Efren J. Agustin, Acting Chief Regulator, Metropolitan Waterworks and Sewerage System-Regulatory Office, representing the Local Authorities

Presentation of the actual situation after privatization; developed tools to have a feed back from the customers on the services provided by the concessionaires (Public Performance Audit). Expectations and visions concerning the future.

Mrs. Lisette Provencher, Maynilad Water Services Inc., representing the Enterprise

Maynilad is the concessionaire for water and sanitation in the West Zone of Manila. Analysis of the local needs, how MWSI takes into account the environmental and sociological dimensions; analysis of the affordability dimension; relations with the local authorities; attitude concerning the consulting of the local population and the NGOs; MWSI's economical analysis; analysis of the implemented public private partnership; perspectives.

Mr. Michael Castaneda, Water and Sanitation project in Paradise Village, Medecins sans Frontieres, representing the Civil Society

MSF has different programs in Manila, one of them dedicated to water and sanitation. Role and involvement of the associations, inhabitants groups, NGOs in the process : elaboration, implementation and management; their role in the evolution of practices and standards. Evaluation and perspectives.

Dr. Arlene B. Inocencio, Ph.D. Economist, Africa Regional Office, International Water Management Institute

A study of the two cases of water services for the poor in Metro Manila. Lessons learned.

Discussion



Role of the local government units in the implementation of P.P.P. in water and in financing decisions, investment and management

Expectations and visions for the future

Aloha Samoza

Director for Environment and Power, Coordinating Council for Private Sector participation, Manila, Philippines

Introduction

Traditionally, water supply development and distribution is a national government-controlled function. The Local Government Code of 1991 devolves the provision of basic infrastructure services to the Local Government Units (LGUs), including water supply and sanitation. Except where special agencies have been established by law to take over this role, the Local Government Units are primarily responsible for the provision of water supply, sewerage and sanitation services within their jurisdictions.

Capacity building at the local level through technical assistance from national government agencies was initiated as the transition of responsibility for project development (activities ranging from project identification, packaging, evaluation, financing, contracting, implementation and monitoring) gradually shifted to the Local Government Units. Project financing through grants and loans sourced from official development assistance which was being provided by the national government has become limited. Funds from the Local Government Units' internal revenue generation are not sufficient to provide all the basic services to its constituents.

With most local water utilities facing difficulties meeting the increasing water demand of a growing population, rapid urbanization and development, and with the government's current financial constraints, private sector participation has become an imperative option for water supply development. Private sector participation (PSP) or public-private partnership (PPP) is a relatively recent trend in the Philippine water sector. PSPs/PPPs in infrastructure development started to gain attention in the mid-1990s when the government acknowledged the private sector's ability to deliver and provide infrastructure services faster and more efficiently, as manifested when the power crisis was solved with the entry of independent power producers in power generation.

As Local Government Units and the private sector are expected to take a more active role in water supply development through public-private partnerships, reforms in the water resources sector particularly in the policy, institutional, and regulatory framework have to be adopted to hasten and improve the delivery of water and sanitation services, especially to low-income households which are buying water with doubtful quality from vendors at prices more than double that for piped water.



Background

The development of adequate and reliable water and sanitation facilities/services in the Philippines has long been hindered by fragmented and uncoordinated planning and policy formulation within the Philippine water resources sector, inadequate institutional capacity, lack of comprehensive data, and financial constraints. Although most of the people have access to water, much is to be desired in terms of service coverage, adequacy and reliability of water supply. The existing sewerage and sanitation facilities are unsatisfactory and inadequate to meet health and environmental standards.

Several reforms have been initiated to improve the absorptive capacity, sustainability of implementation and operation of water supply programs and projects, and to improve the existing institutional and legal arrangements in the water sector. While the need for an integrated, systematic and holistic approach to water resources planning and management has been recognized, the decentralized implementation of programs and projects within the national policy framework of devolution and community-based approaches has been stressed as one of the strategies to improve the delivery of water supply and sanitation services, especially to the poor and low-income households.

Existing Water Supply Systems

Water supply systems in the Philippines are classified into three (3) types: Level I (point source system), Level II (communal faucet), and Level III (individual household connection).

The Metropolitan Waterworks and Sewerage System (MWSS), the largest Level III water system, serves Metro Manila and some municipalities in adjacent provinces. It was privatized in 1997 and is now being operated by two (2) concessionaires,

Maynilad Water Services, Inc. (West Zone) and Manila Water Company, Inc. (East Zone).

Existing water supply system 1

	LEVEL I	LEVEL II	LEVEL III
Description	Protected well or developed spring	A communal faucet system composed of a water source, reservoir and pipe distribution system	A system with a tower, reservoir, a piped distribution network and individual household
Average Number of Households Served	15 within 250 meters	4 – 6 (per faucet) within 25 meters	2000 +
Average Daily Consumption per Person	20 liters	40 liters	100 liters
Areas Utilized	Rural areas where houses are widely scattered	Rural/urban fringe areas where houses are clustered together	Densely populated urban areas

Water districts (WDs) provide water supply services through Level II and III water systems in most urban areas of cities and municipalities outside of the MWSS service area. Larger Water Districts serve Davao City (110,000 connections) and Metro Cebu (71,000 connections) while medium and small water districts have approximately 3,000 connections on the average. The Local Water Utilities Administration (LWUA), established primarily as a specialized lending institution for the promotion, development and financing of local water utilities, provides institutional, technical and financial assistance to all water districts. Local Water Utilities Administration also oversees the performance of all Water Districts. Only about 400 of the 600 formed water districts are currently operational.

Existing water supply system 2

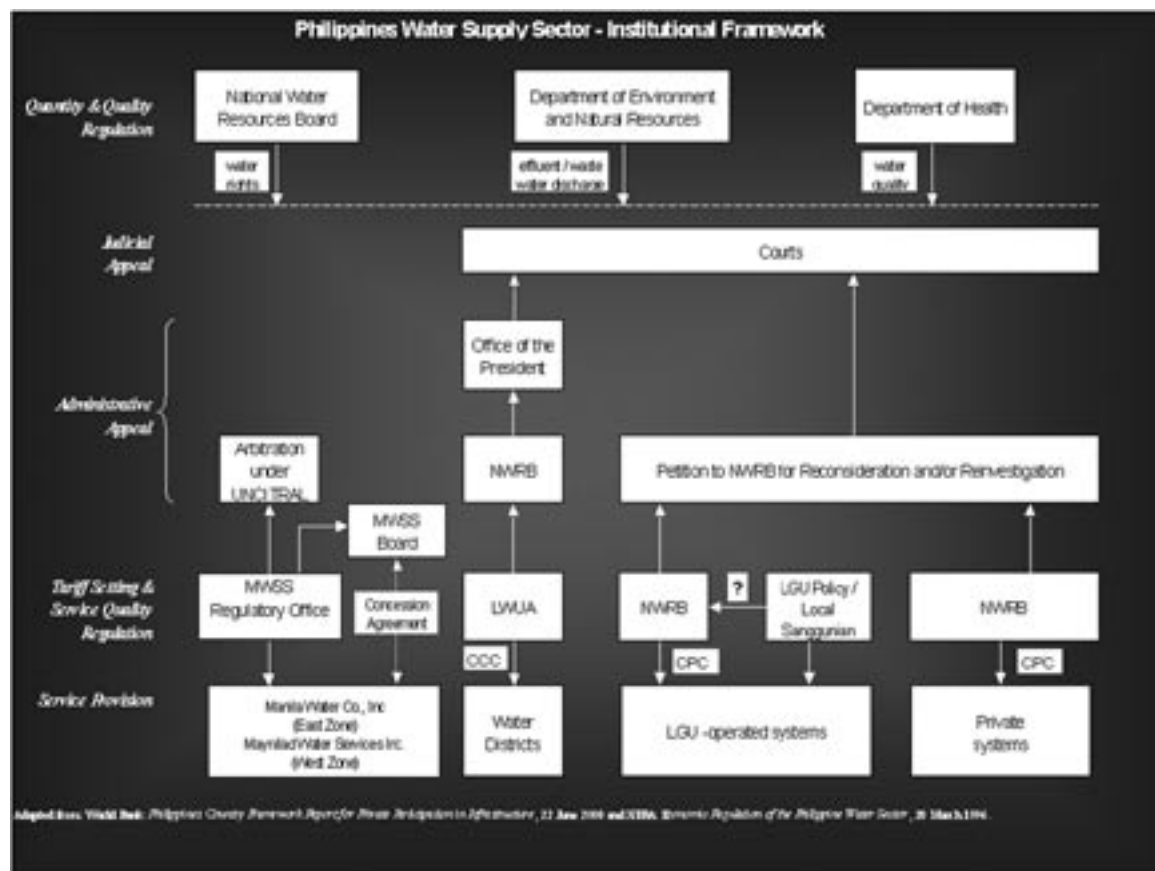
Providers	Population (Millions)	Population Served (Millions)	% of Population Served
MWSS Service Area	13.33	5.90	44.10
Other Urban/Fringe Areas Water Supply (Level II) LWUA/ Private LGUs	20.80	18.33	88.10
Rural Areas Water Supply (Level I, II, III) LGUs/DLGs/DPWH/ Private	42.20	35.80	84.80
TOTAL	76.30	60.03	78.68

Some Local Government Units own and operate Level III water systems. Level I and II water systems are typically used to provide water in rural areas and urban fringe areas and are operated by Barangay Water Supply Associations (BWSA) and Rural Water Supply Associations (RWSAs).

There are also a number of privately owned and operated Level III water supply systems in residential subdivisions and industrial estates not being served by the MWSS and the local water utilities.

The institutional arrangement for the Philippine water supply sector is shown in Figure 1. MWSS, the Water Districts, LGU-owned and operated systems, Barangay Water Supply Associations/ RWSAs, and private water utilities provide the water services. The MWSS Regulatory Office, Local Water Utilities Administration, the National Water Resources Board (NWRB), the Department of Environment and Natural Resources (DENR) and the Department of Health (DOH) regulate the water utilities according to regulatory jurisdictions and tasks.

Water supply sector



The Role of the LGU in the Provision of Water Supply and Sanitation Services

Under the Local Government Code of 1991 (R.A. 7160), the provision of basic services such as

water supply has been devolved to the local government units (LGU). NEDA Board Resolution No. 4 (Series of 1994) and the National Water Crisis Act of 1995 (R.A. 8041) reiterates the significant role of the Local Government Units, being the pri-

mary executing/implementing agencies of water and sanitation projects, and expressed the government's policy of encouraging increased private sector participation in the provision of these services not only to bring in much needed financing for the sector but also to tap the private sector's ability to deliver and provide infrastructure services faster and more efficiently. The decentralization of water supply and sanitation services provision and increased private sector participation are expected to remain as primary policies of government in the development of the sector.

The LGU has three (3) options in providing water and sanitation services to its constituents: (1) creating an LGU-owned and operated water system, (2) forming a Water District, and (3) contracting with the private sector.

The development and financing of LGU-owned and operated water systems are generally carried out through grants and loans extended by external support agencies and local financial institutions, locally generated revenues, internal revenue allotment, national government subsidies and from countryside development funds of congressmen. Project development activities and actual implementation is usually undertaken by the concerned LGU with technical assistance from the Department of the Interior and Local Government (DILG) and the Department of Public Works and Highways (DPWH).

Water Districts are formed at the option of the LGU with technical and financial assistance from Local Water Utilities Administration. Strictly speaking, Water Districts are supposed to be operated independent of the Local Government Unit. However, conflict of interest often occur especially on sensitive «political» issues such as tariff adjustments since the Water District Board is appointed by the local chief executive.

When an LGU opts to enter into a contractual arrangement with the private sector for the development and/or operation of its water and sanitation facilities, it becomes responsible for all

activities from project development, approval, and contract award as well as monitoring the compliance of the private sector with its contractual obligations. Under this set-up, the water supply service provision becomes the responsibility of the private sector while monitoring the performance of the private sector and contract enforcement becomes the main tasks of the LGU.

Legal Framework for BOT/PSP Projects

The Philippine BOT Law (R.A. 6957, as amended by R.A. 7718) and the Local Government Code of 1991 (R.A. 7160) provide the legal basis for Local Government Units to enter into PSP/BOT contracts and/or joint venture agreements with the private sector.

The BOT Law declares government's policy of providing incentives to mobilize private resources, providing a climate of minimum government intervention and, as a form of support, providing guarantees where necessary. The BOT Law authorizes the financing, construction, operation and maintenance of almost all infrastructure projects by the private sector which may be undertaken through any of the following variants: BOT, Build-Transfer (BT), Build-Own-Operate (BOO), Build-Lease-Transfer (BLT), Build-Transfer-Operate (BTO), Contract-Add-Operate (CAO), Develop-Operate-Transfer (DOT), Rehabilitate-Own-Transfer (ROT), Rehabilitate-Own-Operate (ROO), and other variations as may be approved by the President of the Philippines. The Law guarantees investor protection in two (2) ways: via repayment schemes and through a reasonable rate of return on its investment. Government support on a project-to-project basis may be given in the form of cost sharing, fiscal incentives or performance undertaking. The Law also allows unsolicited proposals under very stringent conditions.

The Local Government Code also provides the legal basis for Local Government Units to enter into contracts with the private sector for the delivery of water supply services. Section 35 states that «Local Government Units may enter into joint ven-

tures and such other cooperative arrangements with people's and nongovernmental organizations to engage in the delivery of certain basic services...» while Sections 17 and 302 allows Local Government Units to undertake BOT projects under the guidelines allowed by the BOT Law. The Department of the Interior and Local Government (DILG) has also issued Memorandum Circular 90-104, which includes water supply as among the basic services that can be privatized by contract.

LGU Water Privatization Milestones

The private sector did not hesitate in responding to government's call for investments in the sector. In fact, the private sector was very enthusiastic in showing their interest in the water sector even before government could prepare BOT/PSP water projects for bidding. As early as 1994, the private sector submitted more than fifty (50) unsolicited proposals to the agencies responsible for implementing water projects, such as MWSS, Local Water Utilities Administration, the large Water Districts, and the local government. These proposals were either treated bulk water supply projects with off-take agreements, joint ventures and concessions. It is worth noting that the pioneering PSP/BOT projects were mostly those that underwent competitive bidding while most of the unsolicited proposals did not progress beyond the negotiation stage with the implementing agencies.

The joint venture for the Bohol Provincial Water Supply System is the first water project to be awarded by a local government unit. Bid out in December 1999, the project involves financing, rehabilitation, management, operation and sale of the Province's waterworks system. The bid consisted of a price for the existing assets and the Province's 30% equity in the joint venture company. The estimated 5-year capital expenditure is US\$14 million. The project was awarded to Salcon International, Inc. The joint venture agreement was signed on 28 August 2000. The joint venture company has since taken over the operation and management of the system and has commenced the specified rehabilitation works.

Phase I of the World Bank-assisted LGU Urban Water and Sanitation Project being implemented by the DILG involves the construction of new water supply systems for Local Government Units with service populations ranging from 3,000 to 17,000 customers. The new water systems will be operated by the private sector under lease arrangements. Department of the Interior and Local Government and the participating Local Government Units has so far awarded three (3) lease contracts and five (5) design-build-lease contracts during the period August 1999 to May 2001. Regulation of the private operators will be undertaken by Contract Administration Units (CAUs) to be created under the lease contracts. The concerned Local Government Units implemented both projects with technical assistance from national agencies and financial assistance from external support agencies in project preparation and tendering.

LGU Constraints in the Implementation of BOT/PSP Projects in the Water Sector

Public-private partnerships in infrastructure services generally entail complex procedures that require a level of expertise from Local Government Units in order to adequately identify, prepare and package projects for competitive bidding, conduct bid/proposal evaluation, and project monitoring. While it is acknowledged that private sector entry in water service provision would bring in the technical and financial resources requirements to improve service delivery, the major hindrance on the Local Government Units is their capacity to put together solicited bids that would attract private sector participation. Capability building for the Local Government Units in areas of preparation and management of contracts, regulation of private sector-managed systems, and tariff setting will have to be vigorously pursued to prepare Local Government Units in the shift of responsibility from service provision to performance assessment of privatized water utilities. Unlike the MWSS concessions, the Local Government Units have smaller service areas that are not commercially viable to be developed by private

sector. Clustering and amalgamation of these smaller systems would have to be seriously considered to achieve some economies of scale that would attract the private sector.

Water services are historically characterized by low water pricing and tariff adjustments that are often subject to political intervention. This is compounded by the reluctance of the national government to provide comprehensive guarantees to assure private sector operators/investors that Local Government Units will meet their contractual obligations. The level of performance undertaking or government guarantees that are currently being extended by the government to the water sector is not adequate to address the requirements of private sector lenders. Private investors note that the government developed the BOT Law and BOT contracts that are supposed to be supported with performance undertaking (PU). PUs are crucial to enable small water utilities to attract private sector interest. Most Local Government Units will find it very difficult to raise funds even from local banks. The private sector is experiencing difficulty in coming up with a pure project finance structure for water contracts because of weak LGU cash flows and low credit worthiness. The private sector would find it hard to finance water projects in the same tenor as those used to finance power contracts without adequate government guarantees. Most water utilities are not bankable in the absence of government guarantees due to low comfort levels of private investors on the ability of the water utilities to abide by long-term BOT or concession contracts.

The existing framework for regulation of water utilities being operated by the private sector is not clear. There are regulatory jurisdictions within the existing framework that are overlapping and need to be clarified. Even grounds, procedures and jurisdiction for dispute resolution and appeals, while provided for in the contracts, are not being adhered to. Regulators in the sector are currently perceived as champions of the poor at the expense of the investors. Regulation is a critical

part of any private sector arrangement and regulatory risks affect the willingness of the private sector to participate and the cost of its participation.

Future Drivers for the Finance Sector

The National Strategy and Action Plan for the Water and Sanitation Sector is currently being finalized for adoption at the 3rd National Water Summit scheduled in November 2001. Policies and strategies included in the agenda are mostly intended to strengthen the capability of the Local Government Units in view of its critical role in revitalizing the water and sanitation sector, as follows:

- Coordinated planning and policy formulation within the sector including comprehensive regulation
- Sanitation and sewerage policy
- Conservation of water: the need to price raw water
- Reduction of non-revenue water
- Enhancing water and sanitation provision at the local level
- Promoting economies of scale
- Action at the local level for effective enforcement of laws, rules and regulation
- Encourage private sector participation in the sector
- Sustainable water supply through improved community participation
- Improved financing of the sector through decentralization and market-based mechanisms
- Capacity building strategy

The proposed financing strategy for the sector is aimed at the provision of long and short-term finance for capital investment that matches the demand for services within the context of decentralization of powers to Local Government Units and the adoption of market-based mechanisms. This strategy is based on the premise that the key constraint is access to capital rather than its availability and that water and sanitation services are viable if provision is made on the basis of ability and willingness to pay.

The key thrust towards improved financing in the sector is to reduce the reliance on official development assistance and subsidies in favor of funds from local and foreign capital markets with the lending terms determined according to an adequate assessment of project risks and credit ratings of the borrowers.

It is envisioned that changes will be instituted through the following: establish an effective credit rating mechanisms for Local Government Units, strengthen LGU financial and credit guarantee mechanisms, undertake major tariff reform to effect full cost recovery of water supply services, rationalize the role of financial intermediaries in the market including private funds, improve systems and procedures to develop viable projects for investment, and use of public funds to leverage private investments. These changes are geared towards improving the access of local water utilities to capital market financing and maximize private sector participation in LGU water systems through direct investment, privately raised finance and joint venture operations. Finally, the Local Government Units decide on the appropriate private sector participation scheme, preferably through solicited bids. ■



Appendix 1

Some Definitions Related to Local Units

A local government unit (or LGU) is the general term used to refer to a province, city or municipality or any other political subdivision created, divided, merged, abolished, or its boundaries substantially altered either by law enacted by the Philippine Congress.

A Barangay is the basic political unit within the territorial jurisdiction of a municipality or city. Barangays are created, divided, merged, abolished through an ordinance passed by the Sanguniang Panlalawigan (Provincial Board) or Sanguniang Panglungsod (City Council) within its territorial jurisdiction.

Role of the Barangay - As the basic political unit, the Barangay serves as the primary planning and implementing unit of government policies, plans, programs, projects, and activities in the community, and as a forum wherein the collective views of people may be expressed, crystallized and considered, and where disputes may be amicably settled. It is headed by a Barangay Captain with a council.

Role of the Municipality - The municipality, consisting of a group of Barangays, serves primarily as a general purpose government for the coordination and delivery of basic, regular and direct

services and effective governance of the inhabitants within its territorial jurisdiction. It is headed by a municipal mayor and has a municipal council.

Role of the City - The city, consisting of more urbanized and developed Barangays, serves as a general purpose government for the coordination and delivery of basic, regular, and direct services and effective governance of the inhabitants within its territorial jurisdiction. It is headed by a City Mayor and has a city council.

Role of the Province - The province, composed of a cluster of municipalities, or municipalities and component cities, and as a political and corporate unit of government, serves as a dynamic mechanism for developmental processes and effective governance of local government units within its territorial jurisdiction. It is headed by the Provincial Governor with a Provincial Board.

Just to give an idea, as of 1996, there are

- 75 provinces,
- 1538 municipalities,
- 60 cities and
- 41,293 Barangays in the Philippines. ■

Appendix 2

The Philippines Bot Law 5 R.A. 7718

Definition of terms

«SEC. 2. Definition of Terms. - The following terms used in this Act shall have the meanings stated below:

Private sector infrastructure or development projects - The general description of infrastructure or development projects normally financed and operated by the public sector but which will now be wholly or partly implemented by the private sector, including but not limited to, power plants, highways, ports, airports, canals, dams, hydropower projects, water supply, irrigation, telecommunications, railroads and railways, transport systems, land reclamation projects, industrial estates or townships, housing, government buildings, tourism projects, markets, slaughterhouses, warehouses, solid waste management, information technology networks and database infrastructure, education and health facilities, sewerage, drainage, dredging, and other infrastructure and development projects as may be authorized by the appropriate agency/LGU pursuant to this Act. Such projects shall be undertaken through contractual arrangements as defined hereunder and such other variations as may be approved by the President of the Philippines.

«For the construction stage of these infrastructure projects, the project proponent may obtain financing from foreign and/or domestic sources and/or engage the services of a foreign and/or Filipino contractor: Provided, That, in case an infrastructure or a development facility's operation requires a public utility franchise, the facility operator must be a Filipino or if a corporation, it must be duly registered with the Securities and Exchange Commission and owned up to at least sixty percent (60%) by Filipinos: Provided, further, That in the case of foreign contractors,

Filipino labor shall be employed or hired in the different phases of construction where Filipino skills are available: Provided, finally, That projects which would have difficulty in sourcing funds may be financed partly from direct government appropriations and/or from Official Development Assistance (ODA) of foreign governments or institutions not exceeding fifty percent (50%) of the project cost, and the balance to be provided by the project proponent.

Build-operate-and-transfer - A contractual arrangement whereby the project proponent undertakes the construction, including financing, of a given infrastructure facility, and the operation maintenance thereof. The project proponent operates the facility over a fixed term during which it is allowed to charge facility users appropriate tolls, fees, rentals, and charges not exceeding those proposed in its bid or as negotiated and incorporated in the contract to enable the project proponent to recover its investment, and operating and maintenance expenses in the project. The project proponent transfers the facility to the government agency or local government unit concerned at the end of the fixed term which shall not exceed fifty (50) years: Provided, That in case of an infrastructure or development facility whose operation requires a public utility franchise, the proponent must be Filipino or, if a corporation, must be duly registered with the Securities and Exchange Commission and owned up to at least sixty percent (60%) by Filipinos.

«The build-operate-and-transfer shall include a supply-and-operate situation which is a contractual arrangement whereby the supplier of equipment and machinery for a given infrastructure facility, if the interest of the Government so requires, operates the facility providing in the process technology transfer and training to Filipino nationals.

Build-and-transfer - A contractual arrangement whereby the project proponent undertakes the financing and construction of a given infrastructure or development facility and after its completion turns it over to the government agency or local government unit concerned, which shall pay the proponent on an agreed schedule its total investments expended on the project, plus a reasonable rate of return thereon. This arrangement may be employed in the construction of any infrastructure or development project, including critical facilities which, for security or strategic reasons, must be operated directly by the Government.

Build-own-and-operate - A contractual arrangement whereby a project proponent is authorized to finance, construct, own, operate and maintain an infrastructure or development facility from which the proponent is allowed to recover its total investment, operating and maintenance costs plus a reasonable return thereon by collecting tolls, fees, rentals or other charges from facility users: Provided, That all such projects, upon recommendation of the Investment Coordination Committee (ICC) of the National Economic and Development Authority (NEDA), shall be approved by the President of the Philippines. Under this project, the proponent which owns the assets of the facility may assign its operation and maintenance to a facility operator.

Build-lease-and-transfer - A contractual arrangement whereby a project proponent is authorized to finance and construct an infrastructure or development facility and upon its completion turns it over to the government agency or local government unit concerned on a lease arrangement for a fixed period after which ownership of the facility is automatically transferred to the government agency or local government unit concerned.

Build-transfer-and-operate - A contractual arrangement whereby the public sector contracts out the building of an infrastructure facility to a private entity such that the contractor builds the

facility on a turn-key basis, assuming cost overrun, delay and specified performance risks. «Once the facility is commissioned satisfactorily, title is transferred to the implementing agency/LGU. The private entity, however, operates the facility on behalf of the implementing agency/LGU under an agreement.

Contract-add-and-operate - A contractual arrangement whereby the project proponent adds to an existing infrastructure facility which it is renting from the government. It operates the expanded project over an agreed franchise period. There may, or may not be, a transfer arrangement in regard to the facility.

Develop-operate-and-transfer - A contractual arrangement whereby favorable conditions external to a new infrastructure project which is to be built by a private project proponent are integrated into the arrangement by giving that entity the right to develop adjoining property, and thus, enjoy some of the benefits the investment creates such as higher property or rent values.

Rehabilitate-operate-and-transfer - A contractual arrangement whereby an existing facility is turned over to the private sector to refurbish, operate and maintain for a franchise period, at the expiry of which the legal title to the facility is turned over to the government. The term is also used to describe the purchase of an existing facility from abroad, importing, refurbishing, erecting and consuming it within the host country.

Rehabilitate-own-and-operate - A contractual arrangement whereby an existing facility is turned over to the private sector to refurbish and operate with no time limitation imposed on ownership. As long as the operator is not in violation of its franchise, it can continue to operate the facility in perpetuity.

Project proponent - The private sector entity which shall have contractual responsibility for the project and which shall have an adequate financial base to implement said project consisting

of equity and firm commitments from reputable financial institutions to provide, upon award, sufficient credit lines to cover the total estimated cost of the project.

Contractor - Any entity accredited under the Philippine laws which may or may not be the project proponent and which shall undertake the actual construction and/or supply of equipment for the project.

Facility operator - A company registered with the Securities and Exchange Commission, which may or may not be the project proponent, and which is responsible for all aspects of operation and maintenance of the infrastructure or development facility, including but not limited to the collection of tolls, fees, rentals or charges from facility users: Provided, That in case the facility requires a public utility franchise, the facility operator shall be Filipino or at least sixty per centum (60%) owned by Filipino.

Direct government guarantee - An agreement whereby the government or any of its agencies or local government units assume responsibility for the repayment of debt directly incurred by the project proponent in implementing the project in case of a loan default.

Reasonable rate of return on investments and operating and maintenance cost - The rate of return that reflects the prevailing cost of capital in the domestic and international markets: Provided, That in case of negotiated contracts, such rate of return shall be determined by ICC of NEDA prior to the negotiation and/or call for proposals: Provided, further, That for negotiated contracts for public utility projects which are monopolies, the rate of return on rate base shall be determined by existing laws, which in no case shall exceed twelve per centum (12%).

Construction - Refers to new construction, rehabilitation, improvement, expansion, alteration and related works and activities including the necessary supply of equipment, materials, labor and services and related items.» ■



The privatized water distribution in metro Manila

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Abstract

The Metropolitan Waterworks and Sewerage System (MWSS) ranks among the oldest established water supply and sewerage agencies in Southeast Asia. The transfer of MWSS service obligations to two private Concessionaires on August 1, 1997 was claimed at that time to be the largest water sector privatization program in the world. Today, MWSS continues to exist as a wholly government owned corporation and the Regulatory Office (MWSS-RO) was established to monitor and enforce the Concession Agreements during the 25-year concession period.

This paper presents the experience of the MWSS-RO in the past four years that it has been in operation, a period of steadily building up its institutional capabilities. The task requirements will be considerably strenuous shortly and MWSS-RO urgently needs to enhance work process, conceptually and methodologically, and upgrade staff capabilities accordingly. The immediate task is the first periodic comprehensive performance assessment and rate adjustment exercise due in 2002.

The paper describes the capacity building supports provided by MWSS, as well as the Government, for the MWSS-RO to strengthen its capabilities.

One comes in the form of a World Bank assisted Public Performance Assessment (PPA) Project, which was conceptualized to provide the MWSS-RO with a systematic tool for evaluating the performance of the Concessionaires based on

monitoring and evaluation by MWSS and independent observers, using Concessionaire data and Consumers' perception of service from surveys. This involved a role for the National Engineering Center of the University of the Philippines (UP-NEC) as an independent and unbiased observer of performance measurement.

A consultant group carried out a Pilot PPA Project for MWSS-RO in the period November 1999 to June 2001, covering 100 Barangays in Metro Manila. The full-scale PPA Program, which will involve the entire concession areas is planned to commence in March 2002, and shall be carried out over the balance of the Concession Agreement period, on a continuing, regular basis.

Another capacity building program that is in line for the MWSS-RO is in the form of a Technical Assistance (TA) to be provided by the Asian Development Bank (ADB) starting early next year. The long-term goal of the TA is to strengthen MWSS-RO's institutional capacity to efficiently regulate Concessionaire performance, thereby ensuring people in MWSS service areas have better access to water of better quality at a reasonable cost. The immediate objective of the TA is to help MWSS-RO undertake the first five-year periodic performance measurement and price adjustment exercise due in 2002 (to be overseen under the TA), as well as the current priority tasks, smoothly and efficiently in accordance with the Concession Agreements.

The paper also describes the current status of Metro Manila water distribution under the privatized operations, using Concessionaires' Service Perfor-

mance Information and the Performance Measurement results generated by the Pilot PPA Project. Finally, the paper dwells on some key points that represent the vision of the future Metro Manila water distribution under the MWSS-Concessionaire partnership.

Introduction

The privatization of the Metropolitan Waterworks and Sewerage System (MWSS) is linked to a review of the water and sanitation sector by the National Economic Development Authority (NEDA) in 1994, which concluded that private sector participation would improve the management of potable water supply systems in the Philippines. This led the NEDA Board to issue Resolution No. 4, which specifically encouraged private sector involvement. In recognition of the limited capacity of the public sector to improve water supply and wastewater services, and after passage of the National Water Crisis Act (R.A. 8041) in June 1995, the Executive Branch assumed special powers. The Act aimed to improve overall water resource management and to address specific problems within the MWSS, which at that time supplied approximately 65% of Metro Manila's population with potable water and approximately 11% with wastewater services. The rapid growth of Metropolitan Manila and its vicinity gives rise to the high demand for these services, including related infrastructure. Based upon the Water Crisis Act, and the premise that privatization would create strong incentives for improved performance, the MWSS began a process that led to the award of long-term Concession Agreements to two private consortiums.

The concession agreements, 1997-2022

On August 1, 1997, MWSS awarded two similar concessions under 25-year agreements to the Manila Water Company, Inc. (MWCi) for the Eastern Concession Area and Maynilad Water Servi-

ces, Inc (MWSi) for the Western Concession Area. The division of Metro Manila into two service areas will prevent monopolization of water and wastewater services and promote comparisons of services quality.

Of general concern in the privatization is the efficient and effective delivery of water and wastewater services at costs that are affordable to the users but at the same time provide reasonable rate-of-return for the investments of the private Concessionaires. There are provisions in the Concession Agreements that address these concerns and the MWSS-Regulatory Office was created for the monitoring of the Concessionaires' compliance to the terms of the Concession Agreements.

Mandate of the MWSS- regulatory office

The Regulatory Office (MWSS-RO) was established under the jurisdiction of the MWSS Board of Trustees. No change has been made to the MWSS Charter in this connection. The powers and responsibilities of MWSS-RO are set out in the Concession Agreements. Certain decisions by MWSS-RO, such as those affecting the level of standard rates, require final approval of the MWSS Board. MWSS-RO's mandate to regulate water services is confined to the MWSS service areas and within the framework of the Concession Agreements. With the Concession Agreements already in place, the regulatory functions of the MWSS-RO as defined therein will remain in place throughout the concession period.

An autonomous regulatory body for water in a broader context was not established at the time of the MWSS privatization, as the urgency of the matter preclude the necessary legislative changes. As a result, essential upstream matters, such as broader water resource management among various purposes and the availability of water to meet service obligations under the Concession Agreements have been kept outside the Concession Agreements and consequently, the

MWSS-RO tasks. MWSS-RO and the Government however understand the need for such an independent regulatory body.

The need to strengthen regulatory capabilities

Since the privatization in 1997, a number of changes have occurred in external conditions. The local currency has devalued against the US dollar from approximately PhP 26 at the commencement of the Concession Agreement to about PhP 50 at present. The event triggered requests for an extra ordinary price adjustment (EPA) for excessive currency fluctuations. The El Nino phenomenon caused water shortages in 1997-1998, giving rise to a need for EPA on the grounds of force majeure. MWSS-RO decisions on these were not fully satisfactory to the Concessionaires and further actions ensued, including arbitration. These are common contractual disputes, and not an indication of shortcomings in MWSS-RO's performance.

Nevertheless, these events made MWSS-RO aware of the need for more sophisticated work process of international standards. The current procedures, which were developed largely with MWSS-RO's own efforts, proved to be a tool of limited use in handling regulatory tasks involving experienced international operators. Considerable staff time has been spent to verify methodologies, consider alternatives, or explore new approaches. Such process is inevitable where the Concession Agreements have only general stipulations, e.g. performance penalties. The difficulties have been compounded as the MWSS case is the first of its kind in the Philippines and few MWSS-RO staff had practical experience in similar tasks before. Indeed, the Concession Agreements expect MWSS-RO to use outside experts extensively, especially in the early years of the concession period.

In its effort to address current priority tasks effectively, MWSS-RO had already tapped outside experts to provide the following services:

- Development of Asset Condition Reporting System and Audit of Concessionaires' Asset Condition Report - completed on June 14, 2001
- Flow Instrumentation Audit and Water Balance Study of MWSS Headworks System - on-going

Urgency and relevance of improved business process

MWSS-RO also considers that enhanced work process needs to be developed by 2002, when the first 5-year comprehensive performance measurement and price adjustment («rate rebasing») exercise becomes due. The exercise will mark a key milestone event, as it will set standards and precedents not only for the subsequent periodic performance measurement and rate rebasing exercises but also for all related matters that may arise from time to time during the remaining concession period of over 20 years. A major concern at present is service performance, which need to be validated, mainly in service area coverage and service hours. The MWSS-RO tasks in this regard have become complicated because of the delays in the provision of raw water by MWSS as provided for in the Concession Agreements. The resulting performance assessment will have direct implications on the rate rebasing.

Government assistance

Given the regulatory work already underway for the privatized MWSS operations, the Government requested the Asian Development Bank (ADB) to provide technical assistance (TA) for capacity building support for regulatory work with particular attention to the MWSS-RO.

The TA will help MWSS-RO examine the current work process and enhance it conceptually, functionally and methodologically, and also strengthen staff skills accordingly so that MWSS-RO can perform its tasks smoothly and efficiently.

The World Bank has also provided assistance to the MWSS-RO in handling customer service regulations through the Public Performance Assessment (PPA) Project. It focuses on the Concessionaires' performance in meeting service obligations, such as service coverage, service hours and water pressure, from the viewpoint of customer service regulation. The TA will complement the PPA and focus on the financial regulation area, legal affairs and part of the technical and customer service areas outside the PPA. The long-term goal of the TA is to strengthen MWSS-RO's capacity to efficiently regulate Concessionaires' performance under the Concession Agreements and to help establish independent water regulatory mechanisms. Its immediate objective is to help MWSS-RO undertake the first periodic performance measurement and price adjustment exercise due in 2002, as well as the current priority tasks smoothly and efficiently in accordance with the Concession Agreements. The first periodic comprehensive performance measurement and rate rebasing exercise next year will be overseen under this Technical Assistance.

The innovative public performance assessment (PPA) project

Following the privatization process in 1997, the MWSS Board of Trustees decided that the MWSS-RO needed a systematic framework to strengthen its monitoring activities. Therefore, the Public Performance Assessment (originally Audit) Project was established as a means to evaluate the performance of the Concessionaires.

The PPA was envisioned to utilize independent observers to monitor, evaluate, and report on the performance of the Concessionaires to MWSS and other stakeholders, including the public. This responded to some concerns that service would decrease in certain locations or for certain user groups as a result of privatization.

The World Bank provided funding for the PPA and its pilot implementation in Metro Manila. A consultant group for MWSS-RO carried out the Pilot Project in 100 Barangays of the concession areas

in the period November 1999 to June 2001. The World Bank encouraged the MWSS to undertake the first full implementation of this type of Project in the world. In line with this initiative, the MWSS Board of Trustees decided to take a leadership role in encouraging high quality privatized water service provision through the PPA.

The PPA was conceived to independently monitor and evaluate the performance of the two Concessionaires in delivering water and wastewater services. The results of the PPA will assist the MWSS-RO in its decision-making process, provide the Concessionaires with valuable operational and business planning information, and increase public awareness. This type of performance assessment has been proven effective as a complement to traditional monitoring and enforcement mechanisms of public utility agencies in a number of countries.

The creation of new performance information by location from both service providers and service users and the greater availability of this information to the public is intended to act as a system for improving service decisions, as depicted in Figure 1. The use of both provider and user information provides a cross check on the normal data provided by the utilities on performance. It also focuses the analysis more closely on the service that the users are receiving at the end of the pipe.

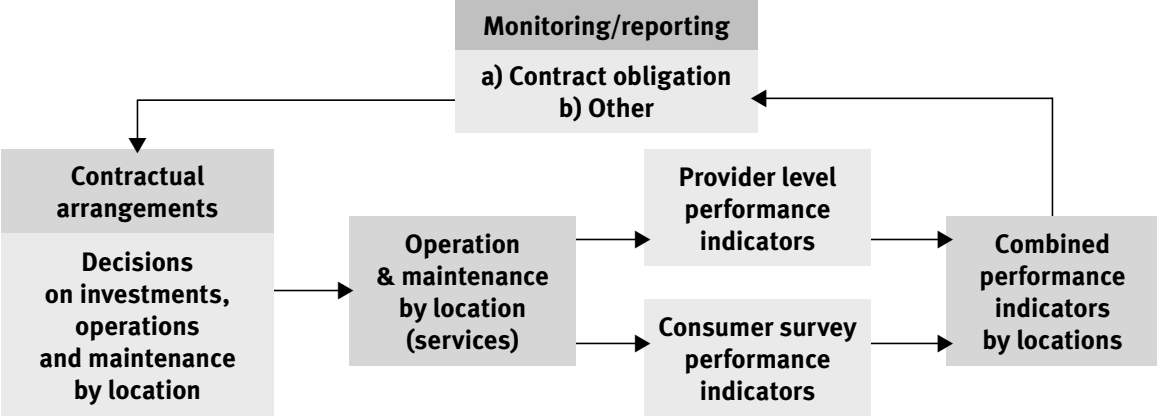
Performance Indicators for Water Distribution

PPA performance indicators were developed from a combination of sources including World Bank research in other countries, Office of Water Services (OFWAT), concessionaire contractual obligations, and the analysis of the available performance data. The performance criteria established for the PPA are:

- Network Quality
- Water Quality
- Risk of Communicable Diseases (Health Quality)
- Service Quality
- Coverage

As discussed earlier, the performance criteria are evaluated from two different points of view - that of the Concessionaire and that of the User/

PPA Performance Feedback to Improve Decisions



Customer. For each perspective, performance indicators were identified in five performance categories and these are presented in Table 1. Each performance category is composed of a set of elementary indicators that are based on different data sources. These indicators are first computed from a set of quantitative physical measures. Pro-

vider-level information is more quantitative since these are based on physical measurements of water and network quality. Consumer-level information relies upon the consumer perception of the service quality that is, usually, presented in a qualitative form (although the questions are phrased with reference to quantitative measures whenever possible).

Provider and User/Customer Performance Indicators

Performance Category	Provider-Level Performance Indicators	User-Level Performance
Network Quality	• Continuity of supply (24 hrs.) • Risk of contamination due to low pressure • Daytime pressure indicator • Nighttime pressure indicator	• Continuity of supply • Supply interruptions • Daytime pressure indicator • Nighttime pressure indicator
Water Quality	• Total coliform count • Residual chlorine concentration	• Water smell • Water color • Water taste • Sand and foreign bodies
Risk of Communicable Diseases (Health Quality)	• Confirmed cases of cholera and typhoid fever • Suspected cases of cholera and typhoid fever	
Service Quality	• Promptness of effective response to complaints • Resolution of complaints	• Percentage of users with complaints • Courtesy of concessionaire • Effectiveness of complaint resolution • Speed of resolution of complaints
Coverage	• Percent population with connections • Percent population with multi-house meter service • Percent population with public tap service • Percent establishments with connections	

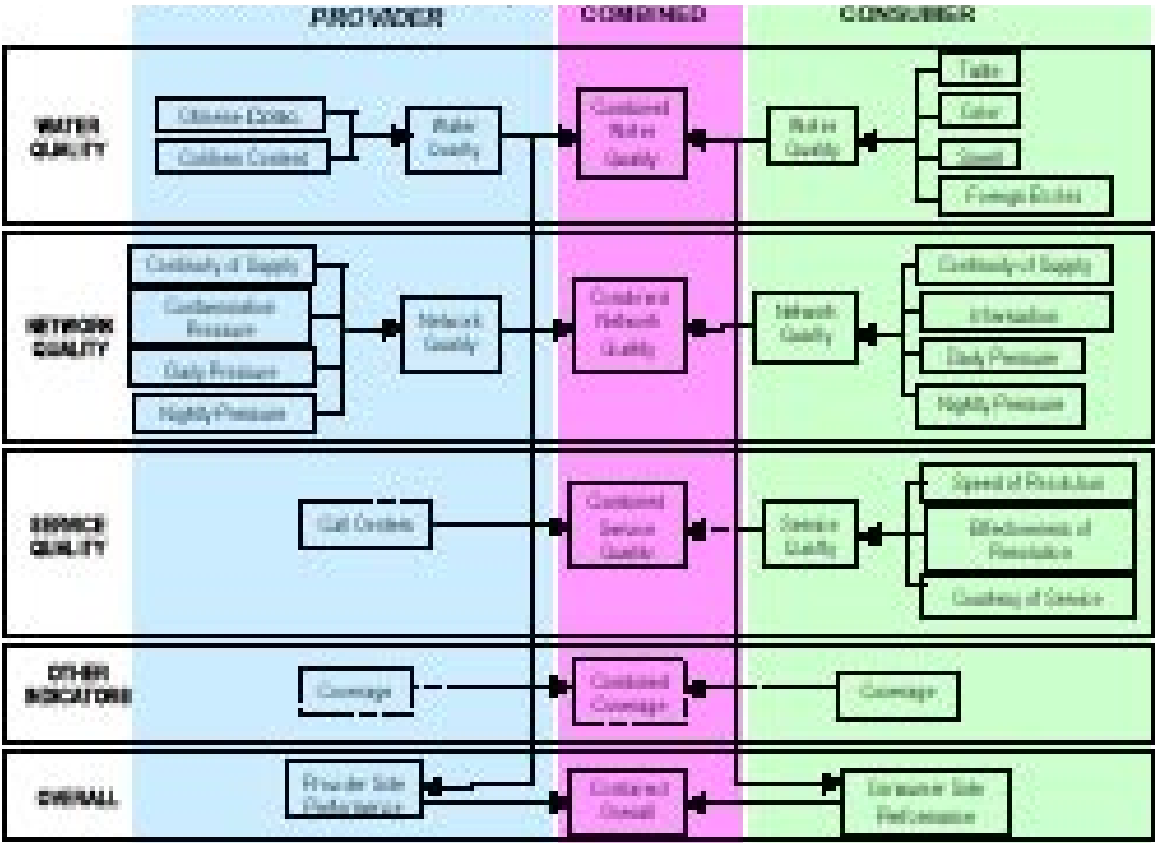
The PPA methodology has the objective of rating performance on a common basis by converting them to a common scale allowing the comparison of provider versus consumer-level indicators. The ratings are made on a five-point scale (very good, good, fair, poor and very poor). Each level of the scale is assigned a numeric value (1 to 5) that is used for the computation of combined indicator values. Statistical measures were used to determine the performance ratings (e.g. no failures of water quality measures was rated «very good», while one failure in 12 months was rated «good», etc..)

The PPA system of performance indicators and their interactions are shown in the flow diagram

in Figure 2. This figure shows how indicators are aggregated and combined to accomplish a range of performance reporting objectives. The Consumer-Level performance indicators are based on consumer responses to a set of survey questions that reflect perception of service provision while the Provider-Level performance indicators are elaborated through review and analysis of Concessionaire data (e.g., Progress Performance Reports).

The synthesis of these service quality indicators, both qualitative and quantitative, will provide the bases for establishing criteria from which Concessionaires' service performance is evaluated and rated.

Performance indicator system



Provider-Level Data

The Pilot PPA database contains post-privatization data on telemetry pressure gauging and water

quality from MWSS and the Concessionaires for 1999 and the first quarter of 2000. These data represented approximately 1,248 water sampling points and 227 telemetry gauging points est-

blished in the entire East and West Concession Service Areas. Monthly monitoring of drinking water quality parameters is recorded and reported for each of the water sampling points. Hourly pressure measurements were made for each telemetry gauging point. These existing data provide coverage of the two concession areas for network pressure and water quality situation in the service areas. The data were cleaned by eliminating inconsistencies prior to data analyses.

User/Consumer-Level Data

User-level data in the PPA is primarily gathered through Consumer Surveys. The design and testing of the surveys represents a major effort and contribution of the PPA to improved performance data for MWSS use.

Consumer data was based on a survey of 10,000 households in 100 barangays of the Concessionaires' service areas. The barangays were selected to represent the Metro Manila area in their composition.

To implement PPA data collection for service quality rating and baseline development, a statistically sound sampling strategy was developed to obtain a 95% statistical level of confidence for any inference level or generalization. A two-stage sampling design with stratification was formulated to select barangays per business area and to select households per barangay based on the sampling guidelines prescribed in the 1997 NSO Household Family Income and Expenditures Survey.

Combined Indicators

Once the individual indicators are calculated for performance measures at the Provider and User Levels, they are combined to measure performance at the barangay level. After the rating system is applied at the barangay-level for each elementary indicator, a rating of each performance category is obtained by weighting each elementary indicator within the same performance category. Two weighting systems were adopted:

- Stakeholder assessment through an interview process for the provider-level indicators; and
- Processing specific value questions from the survey for the consumer-level indicators.

Finally, a third weighting system was created to combine the different performance categories to obtain overall performance for both provider- and consumer-level indicators. This weighting system also used stakeholder interviews to determine the weights.

Aggregated Performance Indicators for Political Areas

The combined ratings for each performance category were aggregated at municipality-level for 17 municipalities and for the Concession Areas using a fourth weighting system. The weight for each barangay was derived from statistical analysis of the socio-economic make up of the barangay compared with the larger political area.

Results of performance measurement

Figure 3 shows the results of the aggregation of ratings by Municipality, while Figures 4, 5, 6 and 7 illustrate the ratings for each category and the overall rating from a geographical point of view (color-coded maps). The Network Quality combined rating shows only one City with a poor rating: Pasay. Four municipalities are rated good: Malabon, Marikina, San Juan, and Valenzuela, while the remaining two more rated fair (see Figure 4). As far as water quality is concerned (see Figure 5) the great majority of municipalities present a very good rating; while the remaining five municipalities: Manila, Muntinlupa, Navotas, Pasay and Pateros are rated good.

The combined rating for service quality is the same as the user's rating since the Pilot Project has only user data for this rating (service quality for the provider-level will be added in the full implementation of the PPA). Seven municipalities present

a poor service quality rating: Manila, Marikina, Muntinlupa, Parañaque, Pasay and Valenzuela, the remaining ten municipalities show a fair rating. The overall combined rating shown in Figure 6 has been created using a weighting system where service quality represents 10%, network quality 26% and the remaining 54% is water quality. Therefore, water quality dominates the ratings.

According to these weights the resulting overall combined rating (see Figure 7) shows all Municipalities with a good rating except Muntinlupa, which presents a fair rating. It seems that this rating system, which was derived from the user survey response, favors the highest rated performance category, which is also the most important for the consumers. This means that the Concessionaires are correctly focusing on water quality performance first.

It is interesting to note that, in some significant cases, the consumer perception of service is more related to the change in service since privatization

than to the level of service as measured from the Provider. For example, there are cases where a relatively high level of service is not rated as high by the consumers, since it has become expected to be high. Instead, a small decrease in service in this case is rated as fair or poor service. This effect tends to occur in high-income communities.

On the other hand, those households with poor service in the past, who have experienced an improvement in service, give their service a higher rating than they would from a purely objective measurement. This effect tends to occur in low-to-medium income communities.

The map presentations were used to effectively communicate the results of the performance assessment to the stakeholders during special fora. This proved to be a better way for stakeholders to absorb a wide range of data showing comparative ratings.

Fig 3 : Overall Combined Performance Ratings at City/ Municipality Level

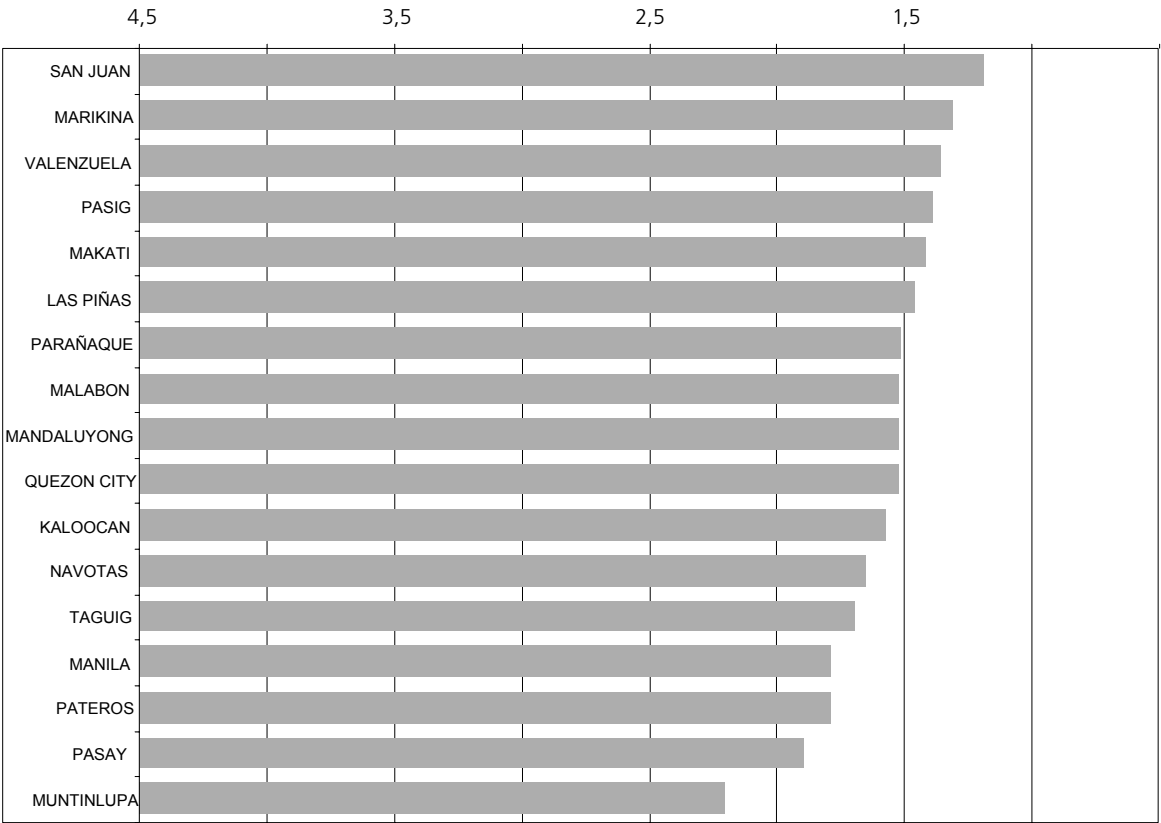


Fig 4 : Combined network quality ratings
Metro Manila area (MWSI/MWCI)

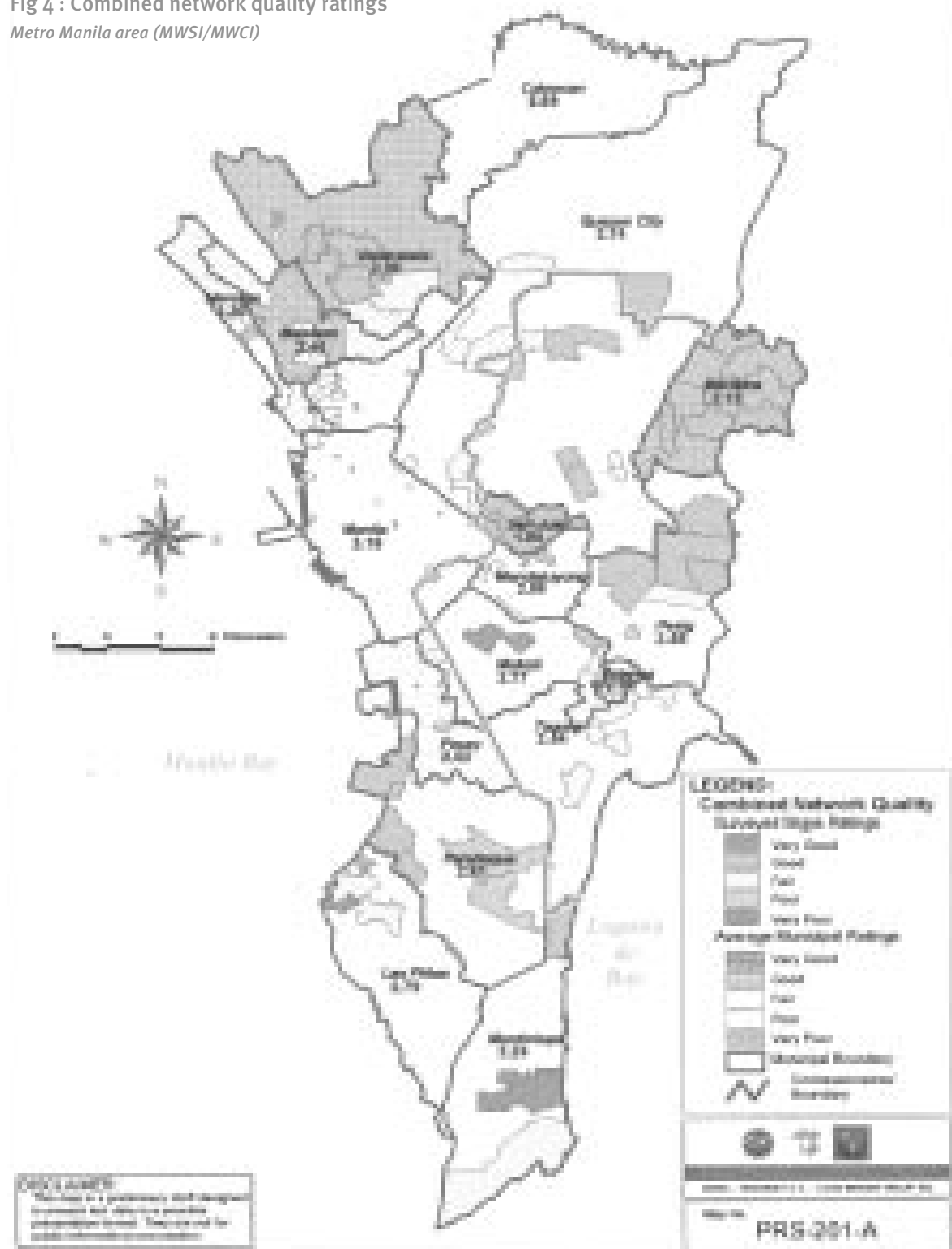


Fig 5 : Combined water quality ratings

Metro Manila area (MWSI/MWCI)

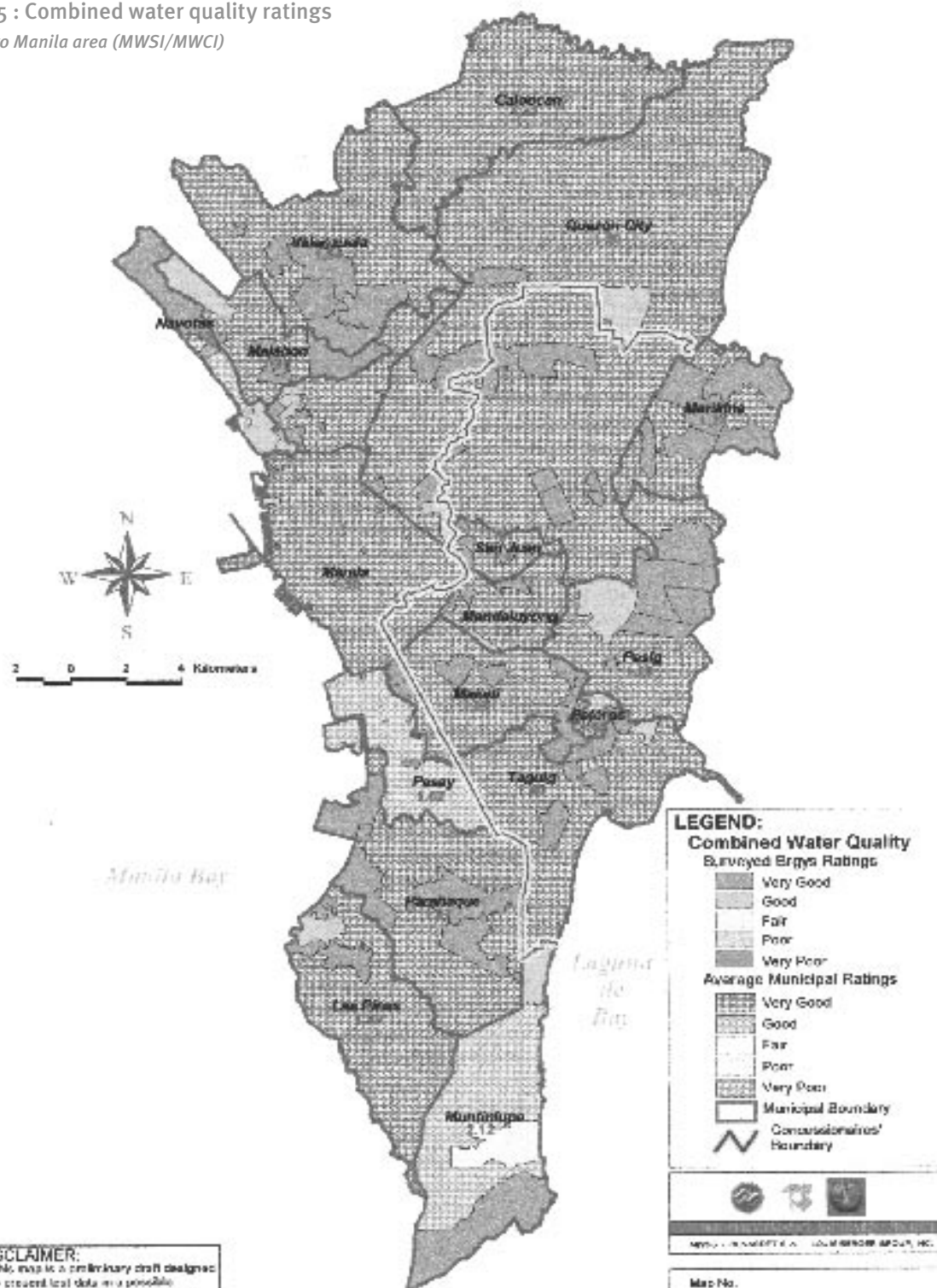


Fig 6 : Service quality ratings
Metro Manila area (MWSI/MWCI)

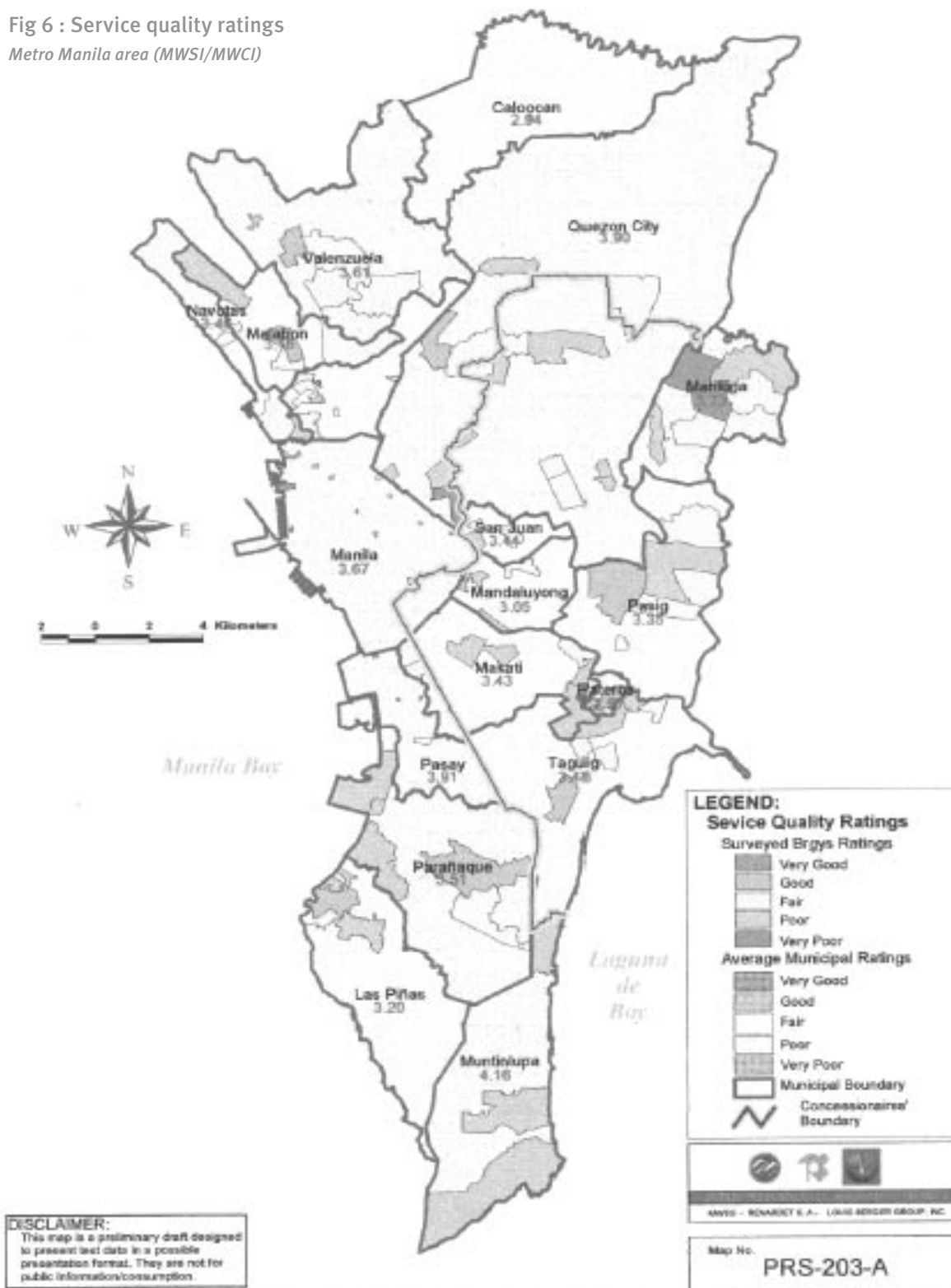
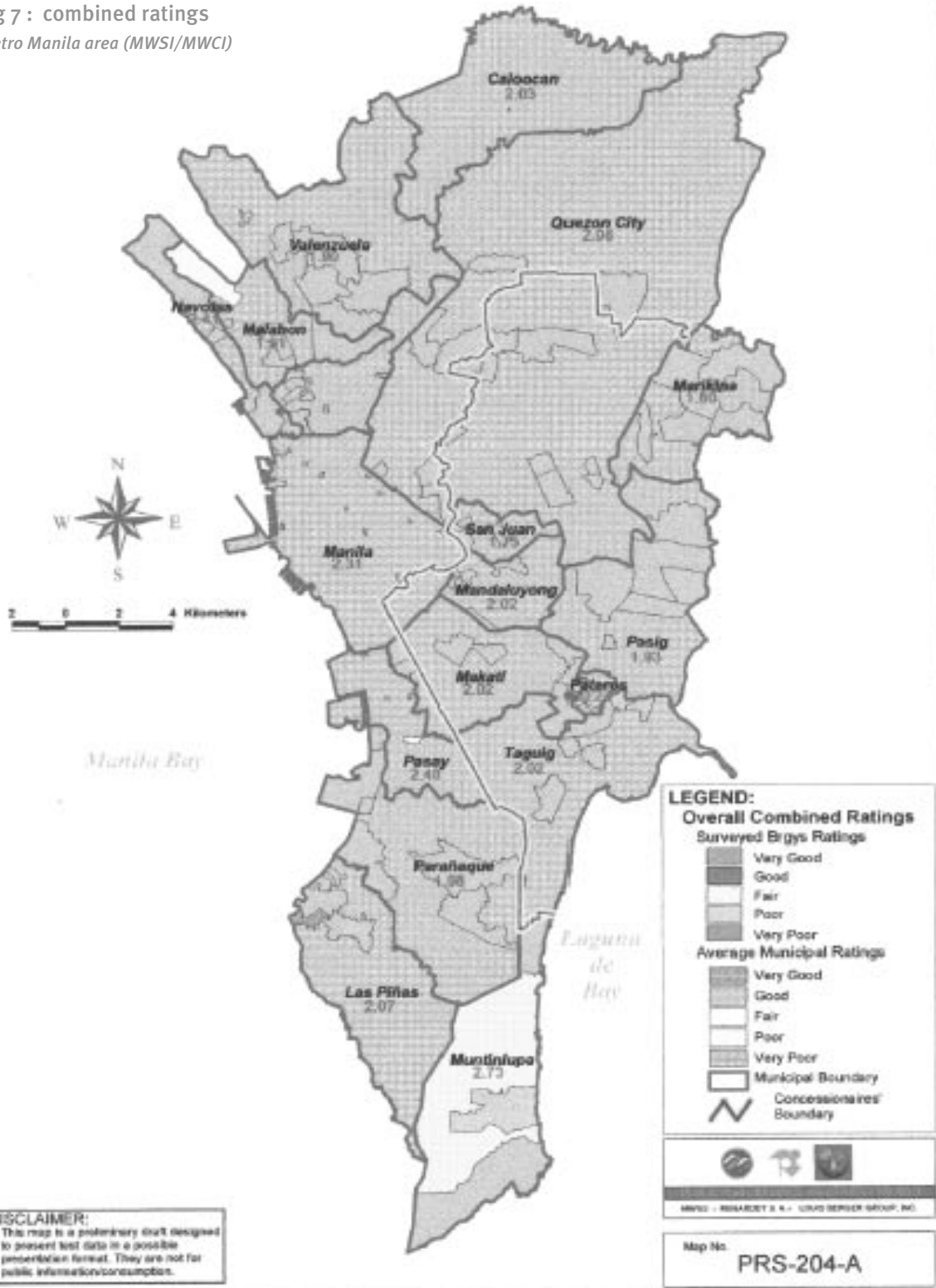


Fig 7 : combined ratings
 Metro Manila area (MWSI/MWCI)



Public consultation and disclosure plan

The PPA has an inherent public character. Its objectives, scope, approach and results are imbued with public interest. A public institution such as the MWSS undertaking a public-oriented project like the PPA has a duty to let the public and various stakeholders know about the what, why, how, where and when of PPA.

The dissemination of information about PPA to the stakeholders is a means for generating public awareness, knowledge, understanding, acceptance of and support for PPA. The success and sustainability of PPA depend on the support of its stakeholders. This support in turn requires an informed public.

Towards this end, a Public Consultation and Disclosure Plan is being carried out by MWSS-RO, thru:

- Regular and continuous PPA dialogue and consultation with a wide range of stakeholders, such as consumer groups, civil society, government and non-government organizations, business sector, media and the academe;
- Presentation of Performance Measurement Results to municipalities by way of «Barangay Roadshows», wherein results of the Pilot PPA Project are disclosed to the 100 barangays covered by the pilot surveys.
- Public access to PPA Data Viewer at the MWSS-RO offices
- PPA Performance Page on MWSS-RO Website (part of Transition Program)
- PPA Performance Display in Concessionaires' Business Area Offices (idea stage)

Institutionalized PPA in MWSS-RO

The experience in the management of the Pilot PPA Project has given the MWSS-RO valuable insights and perspective about a useful technology for monitoring the performance of the Concessionaires. The MWSS-RO is now very much encour-

aged in its role as a regulatory body that it has in the Project a practical tool for improving water service performance through objective monitoring and feedback.

The President of one of the Concessionaires, during one of the stakeholder workshops, cited the potential of the PPA information system as a «Partnership Tool», and that it could be used as a framework for exchanging information between MWSS and the Concessionaires with the purpose of improving water distribution service.

The positive reaction of the public during Barangay Roadshows and the encouraging responses of a wide range of stakeholders during PPA presentations indicate that it is indeed, in the best interest of the MWSS-RO that it avail itself of the full potential of the PPA.

In its effort to institutionalize the PPA System in MWSS, the MWSS-RO has initiated the creation of a regular PPA Department. It is also currently implementing a PPA Transition Program (Training Activities for the managers and staff of both MWSS-RO and Concessionaires involved in the PPA), in preparation for the planned commencement of the full implementation in March 2002.

Measures of performance

The past four years of the Concessionaires' operations saw great improvements in the delivery of water and wastewater services when compared to the pre- privatized MWSS level of performance. Over the past four years, there was a significant increase in the number of customers connected to the water system, population served and the volume of water distributed to customers. Conversely, there was a substantial increment in the amount of capital investments that went into the development, improvement and maintenance of facilities and services. Following is a presentation of available data to illustrate these improvements.

Facts sheet (comparative DATA)

A. GENERAL DATA		MWSS - 1996	Concessionaires - 2000		
			Combined	East zone	West zone
Service Area		1,274 sq.km	1,955 sq. km	1,415 sq.km	540 sq.km
Staff		7,628	3,997	1,540	2,457
Annual O&M Cost	Php	1,697,860,000	6,452,748,113	1,376,941,722	5,075,806,391
	USD\$	64,351,880	129,365,439	27,605,087	101,760,352
Annual Capital Expenditures	Php	1,258,464,000	3,528,929,075	554,937,490	2,973,991,583
	USD\$	47,716,084	70,748,378	11,125,451	59,622,927
Annual Revenue	Php	3,636,000,000	4,134,474,162	499,628,305	2,634,845,857
	USD\$	137,863,047	82,888,415	30,064,721	52,823,694
Average Tariff Rate (per cu.m.)	Php	8.95		2.95	6.58
	USD\$	0.34*		0.06**	0.13**

Note : * - 1996 USD = Php 26.34, **- 2000 USD = Php 49.88

B. SERVICE INDICATORS		MWSS - 1996	Concessionaires - 2000		
			Combined	East zone	West zone
Population		10, 610,000	11,253,627	3,700,00	7,553,627
Water Production		2,800 MLD	3,734 MLD	1,734 MLD	2,000 MLD
Connections		779,380	951,798	339,491	612,307
Service Coverage		67%		88%	83%
Water Availability		17 hrs/day		21 hrs/day	21 hrs/day
Non- Revenue Water (NRW)		58%		44%	66%
Staff /1,000 Connections		9,8		3,7	4,3

100

Performance measurement results of the pilot PPA project

(Conducted in 100 Barangays in the concession areas in Metro Manila as of June 30,2001)

- There has been substantial improvements in water distribution service in Metro Manila since MWSS privatization.
- 10,000 households in the PPA Pilot Survey think service is :
 - better 33%
 - same 55%
 - worse 12%
- Areas of Service improvement include municipalities where new pipes were laid, and where water improvement programs for depressed areas were carried out by the Concessionaires.
- Water Quality ratings are consistently good.
- Network Quality including hours of service is a major area for future improvement in some surveyed barangays in eleven Business Areas.
- Service Quality as measured in the survey is another major area for improvement with over 50% of barangays showing poor rating.
- Overall performance of the Concessionaires in 100 surveyed barangays was rated mostly good to very good (82%).

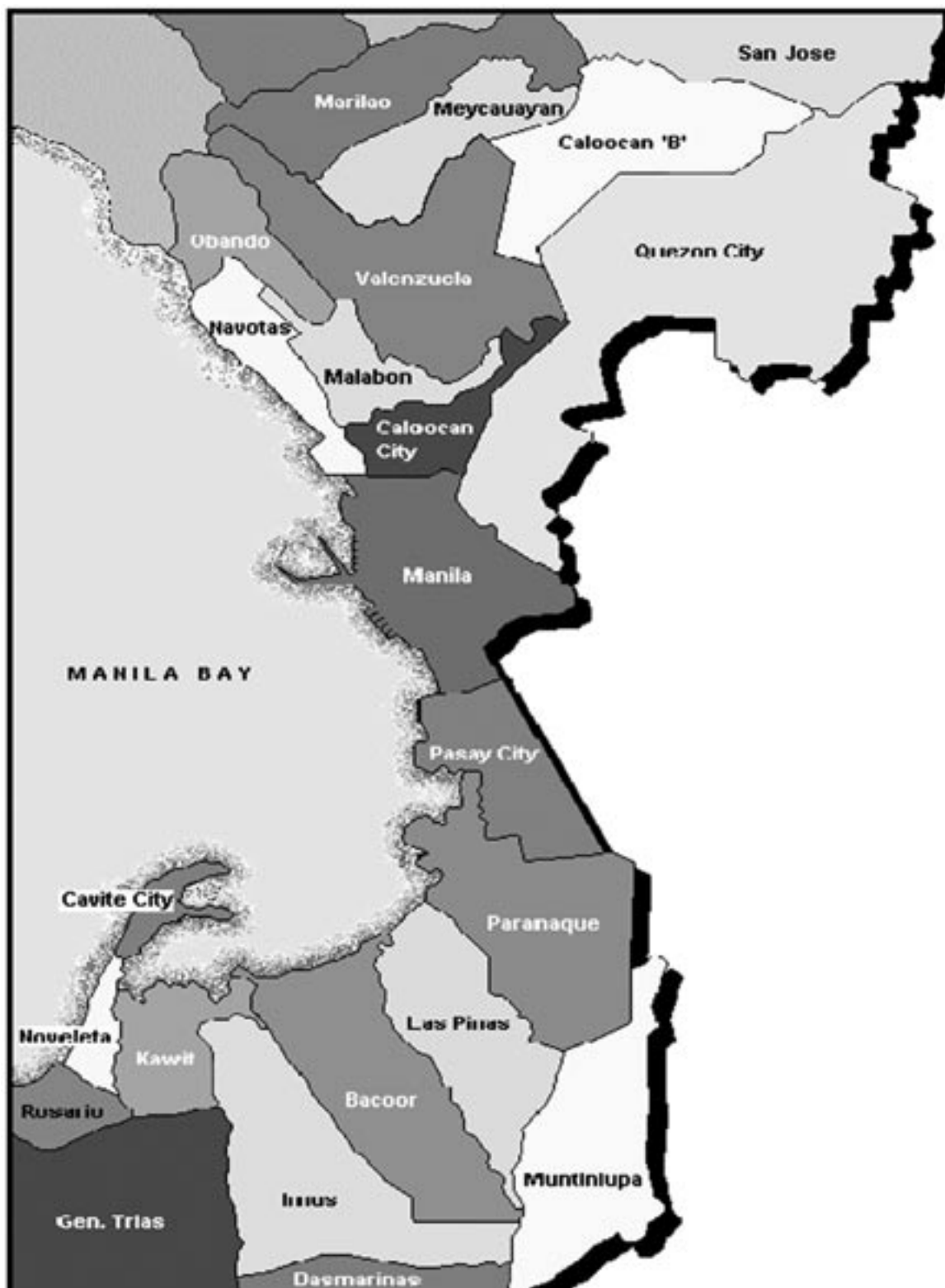
- Combined Ratings of Performance for both Consumer and Concessionaires showed:
1/barangay very good
94/barangays good
4/barangays fair
1/barangay poor
0/barangay very poor

Vision of the future metro Manila water distribution

Based on the provisions of the Concession Agreements and the goals of both the MWSS-RO and the two private Concessionaires, the following key points represent the vision of the future Metro Manila water distribution:

- Independent MWSS-RO with a developed work process of international standards, performing its tasks smoothly and efficiently.
- The Public Performance Assessment (PPA) System institutionalized in MWSS and serving the legitimate interests of all Stakeholders in water and wastewater service performance.
- Concessionaires' successful and satisfactory compliance of their service obligations in accordance with the Concession Agreements, as well as other institutional requirements pertaining to the improvement of the quality of the environment and the promotion of public health and sanitation conditions in Metro Manila.
- MWSS-RO and the Concessionaires harmoniously working together in delivering improved water and wastewater services to the equally satisfied consumers in Metro Manila and the entire concession areas.
- The MWSS privatization as a successful public-private partnership in water and wastewater service provision, the lessons learned and good practices replicated by local and international utility systems. ■





Water supply in low-income areas

West zone metro Manila

Lisette Provencher

Maynilad Water Services Inc.

Background

General data

At the beginning of 1997, there has been an international tender for the concession, over 25 years, of the water and wastewater services in Metro Manila. The Philippine government divided the service area into 2 zones, and awarded them to the winning bidders - Maynilad Water Services Inc. (MWSI) for the West zone, and Manila Water Company Inc. (MWCI) for the East zone.

Maynilad Water Services Inc. is a consortium formed by Benpres Holdings Corporation (a Philippine company - the flagship company of the Lopez Group of Companies) and Ondeo Services (former Lyonnaise des Eaux).

As part of the concession agreement, Maynilad has to expand the services in a given timeframe. The so-called «blighted» areas were not covered by the water networks. People in these areas used to take their water from public faucets, water vendors, illegal connections, shallow wells, rain water, and so on.

As per the 1997 survey, 40.6% of the population of the Philippines was below the poverty line (51.2% in rural and 22.5% in urban zones).

Based on a more recent survey (1999) in the West zone, we have:

- 35% of households lives in «blighted» areas
- 18% of households is illegal occupant of the plot where they live
- 3% of the households uses public faucets
- globally, households devote 2.1% of their budget to water
- 20% of the population earns less than 1,550 PhP/month/capita (\$1 a day); this represents around 1.5 M inhabitants.

For this 20% of the population, we have:

- 62% of households lives in «blighted» areas
- 36% of households is illegal occupant of the plot where they live
- 47% is connected to a network (public, private, directly or indirectly connected)
- 30% is sharing a connection
- 7% of the households uses public faucets
- 32% is supplied by neighbors and vendors

The price of water in Metro Manila in 1999 was:

- Residential connection to MWSI’s network: 6.4 PhP/cu.m.(average residential tariff)
- Private network: 12.3 PhP/cu.m. (average over the concession area)
- Non-connected: 50 PhP/cu.m. (average over the concession area).

More specifically, for 20% of the population considered as the poorest, we have:

	Consumption (cu.m./month)	Amount devoted to water (PhP/month)	% of their income	PhP/cu.m.
When connected to Maynilad network	27	141.80	1.8%	5.35
When not connected (average)	8	329.70	4.5%	39.60
When not connected (as in F. Carlos, QC)	13.5	1,125		83.33

These figures show that, when they are connected to the network, people consume more and pay less for a better quality of service (no need to spend time to get the water) and for a better quality of water.

Concession agreement

The concession agreement recognizes the possibility of supplying water through «public stand-pipe».

MWSI policy

A policy for water supply to depressed areas has been set up in September 1998. This policy identifies three levels of services:

1. Public faucet- level I - Local Government unit endorsed
2. Public faucet- level II - NGO/Community association requested
3. Individual Metering scheme



The Barangay Water Association or the Community Water Association (CWA) may provide labor requirement and materials subject to and conformity with MWSI specifications in the installation of Public faucet I&II. Billing for public faucet I&II shall be based on bulk selling at a specific public faucet rate¹. For the payment of water bills, the Barangay Chairman/President of the CWA and their respective Treasurer shall be jointly and severally liable.

MWSI is currently billing for 402 public faucets.

Bayan-tubig project

MWSI realized that the request of the people, even in the blighted areas, was for individual water connections, and not for public faucets. The water bill did not appear to be a problem, as the price is much lower than what they use to pay for water.

The «Bayan-Tubig»² project was launched in order to meet the requirements of our customers. In most cases, people ask for an individual connection. They do not want a public faucet or other type of communal system.

It seems that this choice is related to the actual management of public faucet. In many cases, the «manager» of the faucet, when this is not an association, applies high cost for water. In the case of associations, in some areas, there might be «political fight» for the control of the public faucet.

The cost and the control on their water supply seem to be the two major elements for their request for individual connections.

In order to satisfy the needs of our customers, taking into account the fact that most of these areas are squattered (without property titles) and in many cases, it is impossible to reach each individual house, the «Bayan-tubig project» was developed.

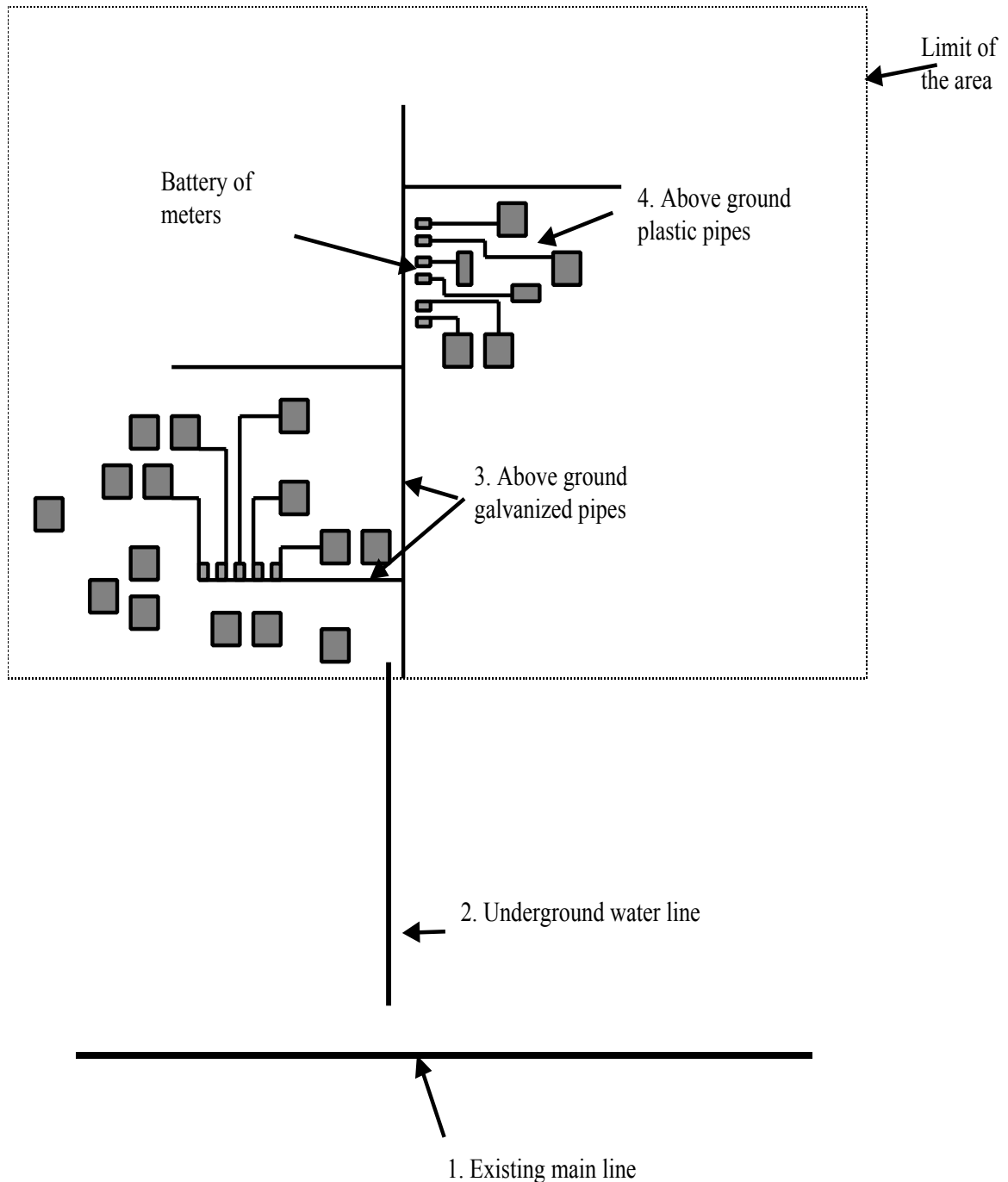
¹ Each public faucet water service shall be based on monthly water meter readings at the rate of the domestic consumption block, which correspond to the average consumption per household.

² Bayan Tubig = Water for the community

The general framework is the following:

The underground line is built up to where it is possible. When it is not possible to bury the pipe (because it is too narrow, for example), the rest

of the network is either above ground or on the ground, or partially covered or attached to a wall. This line goes up to a battery of meters. From the meters, each homeowner makes his own plastic connection, above ground.

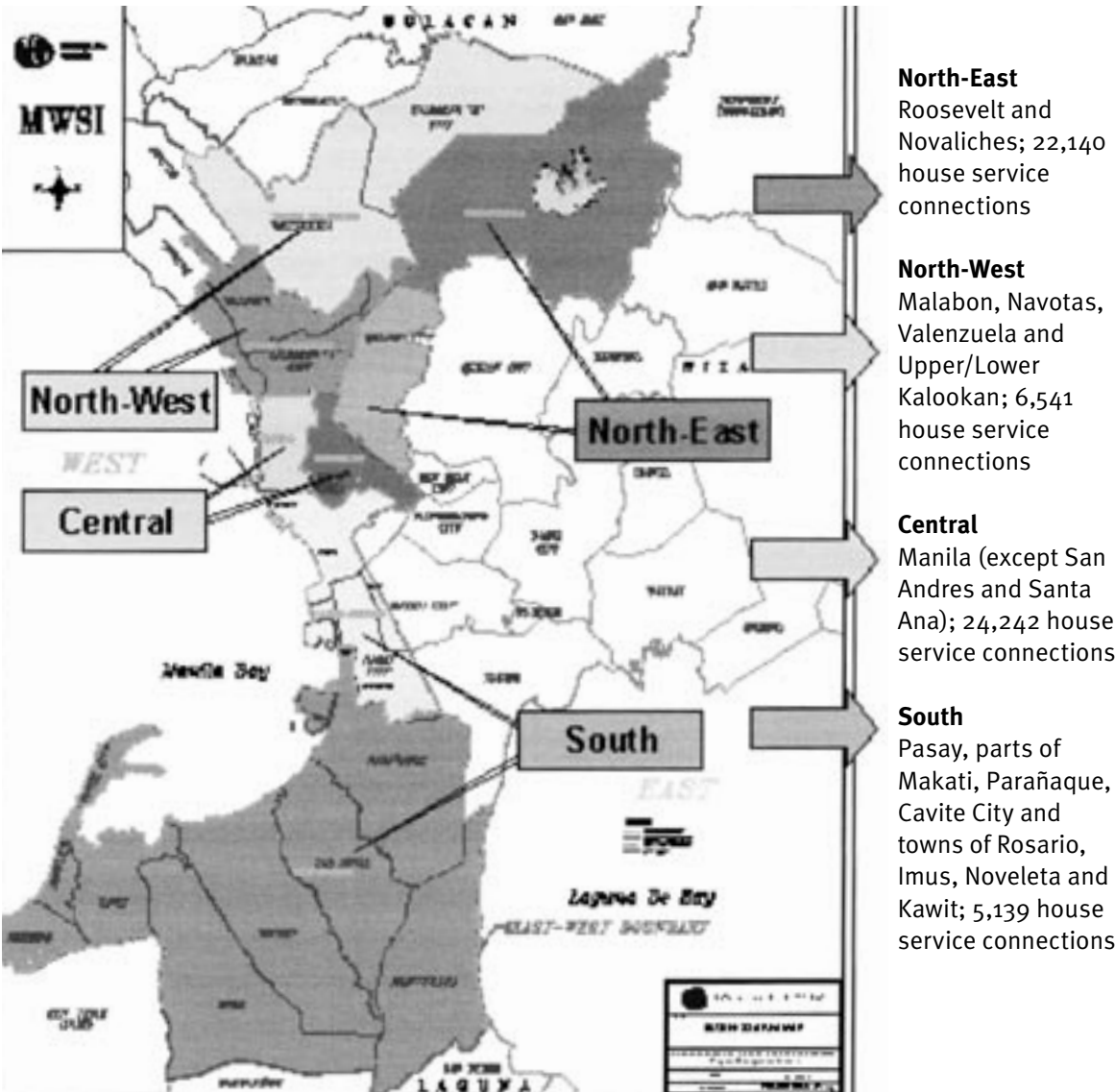


Depending on the area, this scheme can be modified, and the pipes can be buried up to the battery of meters.

Since the beginning of the concession, the total number of connections increased by 105,630 and the «bayan tubig» connections represent 51,820 house service connections (HSC). Overall, 49% of the new connections has been done through the «bayan tubig scheme», spread in the different areas of the concession.

Business area	HSC Installed
Central	24,242
Northeast	22,140
Northwest	6,541
South	5,139
Total	58,062

Geographical implementation of the connections



NEWS RELEASE February 17, 1999
MAYNILAD WATER LAUNCHES BAYAN-TUBIG PROGRAM

Maynilad Water Services, Inc. the private water concessionaire serving Metro Manila's West Zone, has launched the Bayan-Tubig program which aims to provide water service to low income and depressed communities.

In ceremonies held today in Novaliches, Quezon City Mayor Ismael Mathay Jr. and Maynilad Water president Jose Gabriel Olives inaugurated 224 newly installed water connections in Tarhville Subdivision a blighted area located in Sta. Lucia, Sauyo, Novaliches. Each of the homes received a water meter, and the convenience of steady water supply at strong pressure.

«Residents of Tarhville have long waived for their own individual water connection. With the Bayan-Tubig program, communities such as ours can now enjoy clean, safe water direct to our homes», Barangay Captain Luciano Galvez said.

Bayan-Tubig enables Maynilad Water to fulfill its social commitment of providing quality service to low income communities and depressed

areas. The program was designed to be affordable and offers easy terms. Under the program, usual requirements such as the presentation of property rights, land titles, and transfer certificate titles are waived.

Customers can apply for a service connection by paying a minimum installation cost of P3,698, which can be made on installment over six months or 12 months. Applications are processed on site through a Maynilad Water representative.

«Bayan-Tubig also weeds out illegal connections by making the users of Maynilad Water our legitimate customers», Maynilad Water president Olives said.

Before Tarhville was connected, residents got their water by illegally tapping on the water mains, or purchasing water from vendors who charge high rates. Illegal connection result in wastage due to water leaks and possible contamination due to seepage whenever the water pressure is low.

Case study
Carlos project, Barangay Apolonio Samson/ Baesa, Quezon City (Northeast Business Area- Roosevelt Branch)

Background

This 2.5-hectare land of national government property is located at the dead end of F. Carlos St., Bgy. A. Samson and Baesa, Quezon City. Roughly 6,000 men, women and children dwell in this vast area where Meralco Electric Towers are a common sight. Blue-collar workers such as carpenters, laborers, and vendors are the breadwinners for each family.

Some have small-scale businesses like sari-sari store, bakeries, eateries and repair shops of small electric equipment.

Five (5) associations namely: F. Cena, NAMAFA, Tanglaw, SAMAKAPA and Friendship each with its own set of officers are considered neighborhood associations whose function is to unite every family for the good of the community.

Water supply

Before the project, 40% of potable water needs were covered by 6 MWSS's public faucets, inherited from MWSS¹ time. Each household would get one hour of water (from public faucet through a

¹ MWSS = Metropolitan Waterworks and Sewerage System, the public entity managing water and sewer in Metro Manila before the privatization.

hose) every other day. The cost was 15 Pesos/hour or a minimum of 225 Pesos/month/household (15 Pesos x 15 days).

The difference of the potable water needs (60%) came from water vendors, selling water from illegal water connections. Each household would get

one drum (200 liters) per day. Cost was 25 to 30 pesos per drum or 750 to 900 Pesos/month per household (25 to 30 Pesos x 30 days).

Other water needs (washing, etc.) were supplied from manual shallow wells (the barangay F. Carlos has several), rain water, etc.

The overall estimated cost and consumption is the following:

	Consumption (cu.m./month)	Cost (PhP/month/household)	Cost (PhP/cu.m.)
Faucet	7.5	225	
Vendors	6	900	
Total	13.5	1,125	83.33
MWSI ¹	For the same consumption of 13.5 cu.m.	73.36 (including fixed charge, sanitation charge, CERA, but excluding VAT of 10%)	5.43

¹ Tariff as of October 2001



With the high cost of water affecting their meager income, a much cheaper and alternative source from the MWSI was then considered. Representatives from the associations came to MWSI to request for a water network.

Campaign and implementation

Meetings with the different associations were conducted discussing the procedures of registration and pricing in July and August 1999.

The connection charge, as prescribed in the concession agreement was representing 3,500 PhP in 1999. An installment program over 12 months was proposed to the people who needed it. Even with the connection charge, the households were still paying three times less for the water than what they used to pay (348 PhP/month vs 1,125 PhP/month).

Mass registration and application processing of about 700 families responded and paid the down payment. It was on September 16, 1999 that the project started. A 422 linear meter 150 mmØ PVC main pipe was laid. The layout was completed and the hydro-test passed on September 25,



1999. A contractor was utilized for the activity. In-house teams were then utilized to install 2,500 linear meters of 50 mm Ø GI pipe to serve as laterals or tertiary mainlines. Water meters were subsequently hooked-up from these tertiary mains. As of October 31, 1999, 884 water service connections were installed. The first bills were delivered on November 14, 1999.

Conclusion

This example shows how the private sector can deliver services to the urban poor. As a private operator of a public service, MWSI is dedicated to serve all its customers, the poor and the rich.

Happily for Maynilad Water Services Inc., both partners Ondeo Services and Benpres share the same vision, as expressed by the Founder of the Lopez group of Company, Eugenio Lopez:

«Public service is the only reason for our existence. Profit alone is not enough of a reason to go into business. But if we can serve people, then I think our growth and success will follow. If we take care of our customers, then they will take care of us. This is the kind of culture a company should have.» ■





Water and sanitation project in Paradise Village City of Malabon Philippines

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Introduction

Médecins Sans Frontières - CH or Doctors without Borders is a private international non - governmental organization. The organization was founded in 1971 and the main objective of its humanitarian action is to assist and protect populations in danger, with those most under threat given highest priority. MSF counts 18 sections and is active in over 80 countries worldwide. The MSF movement was awarded with the 1999 Nobel Peace.

MSF Switzerland started its activities in the Philippines in 1997. In the year 2001 the work focuses on three programs: A Pharmacy Cooperative in Sulu, Street Children Program in Manila City and a Water and Sanitation Program in Malabon.

Since February 1998, MSF has been working on a water and sanitation project, in the slums of Malabon, in collaboration with different local partners. The goal of the project is to improve health and sanitary conditions of the communities living in such precarious areas such as Paradise Village and People's Village in Malabon, which are located north of Metro Manila.

Actually, the Letre road slum, in Malabon is a swampy area, previously a marine pond under sea level. These slums are flooding every year due to the rainy season from June to November and high tide.

Most of all, stagnant and polluted water are evident due to the lack or poor drainage system which is visible the whole year. This project is divided into two aspects. The social aspect of the project foresees a sanitary education program for

the community and the creation of a group called «Committee on Health and Sanitation» (CHS), which is responsible for the implementation, construction and maintenance. The technical aspect of the project undergoes the building and rehabilitation of the drainage system to throw of the stagnant and dirty water. The channels are built with the community's participation during the construction and supervision as well. In the future, this «Committee on Health and Sanitation» should be able to assume the maintenance of the drainage system and solid waste management/garbage collection.

The main achievements are the construction of a bridge across the Letre road to Paradise Village, the repairs and construction of 1200 linear meters of canals and alleys in Paradise Village Phases I and II and the construction of 1272 linear meters of canals and alleys in People's Village Phases I and II (On - going).

This program can be efficient only if the population are conscious to health and environment problems and willing to participate in improving their situation.

Water and Sanitation Program

In February 1998, MSF - CH with partnership with a local NGO, LINGaP Foundation Inc., started a Water and Sanitation Project in Paradise Village Phases I and II, which is a part of the Letre slum in Malabon. LINGaP Foundation introduced MSF in the community after which proposed the project and actively participated in the implementation.

Metro Manila, which is located on an estuary, flooding is a major problem for the region especially for the cities or municipalities in the north of the area: Caloocan, Navotas, Valenzuela and Malabon.

The city of Malabon is one of these affected by the regular flooding. A large slum area is situated in this city. The slum community of Letre road was previously a marine pond that was filled up with garbage. It is composed of two barangays in Malabon that comprises around 64,000 inhabitants. The two sectors are composed of Barangay Tonsuya: Paradise Village Phases I to VI, LUPA, PPA and DAMATA and Barangay Catmon: Dulong Hernandez (NADHAI) and People's Village. About 70 - 75 % of this community belongs to the poor or below the poverty line. Majority of them are informal settlers or squatters.

The sanitary conditions are critical in the area. Drainage problems are particularly serious during the rainy season from June to November and high tide. This phenomenon is not only a nuisance for the inhabitants but it can also be of public importance. Since the area is below sea level, polluted floodwater from nearby rivers and neighboring facilities enters the village adding to the wastewater, which can lead to the contamination of drinking water thereby causing water borne or vector related diseases. Stagnant and contaminated water can be observed throughout the year as a result of ineffective drainage, which serves as a breeding place for mosquitoes. The inappropriate treatment of the population also aggravates the sanitary condition of their community.

The typical housing structures are made of galvanized and light materials. Thirty percent of the population belongs to the middle and upper income bracket group relative to the rest of the population. The houses of this group are made up of concrete hollow blocks and galvanized roofing materials. While the seventy percent, their houses are made of lumber with second hand roofing items. Houses of the families living near the waterways are built of light materials.

The community availed of water through the illegal network. There are individuals who earn money by selling water to the neighborhood. They use plastic pipes to connect the people source of

water. These pipes are often in bad shape and runs through the stagnant water. The existing network is not only a threat to the public health but it is more expensive than the water provided by MWSI or Manila Water.

The project focuses at Phases I and II of Paradise Village and People's Village. These communities are chosen as project areas because of MSF's criteria. The most important criterion to be followed in choosing a project area is the legality of the land. Which means the residents should be landowners through the Community Mortgage Program or other land acquisition process.

Objective

The main objective of this program is to improve the environmental sanitary conditions of the communities in hazardous residential areas in Paradise Village and People's Village by construction of a water drainage system and by education and by increasing the public awareness about hygiene problems.

The project is divided into three specific objectives. These elements assure the possibility to achieve the main objective:

1. The construction of the water drainage system
2. Education and public awareness on hygiene, maintenance, environmental problems and solid waste management.
3. Investigation of the areas, stakeholders and the legalization process for land ownership.

Specific Objectives

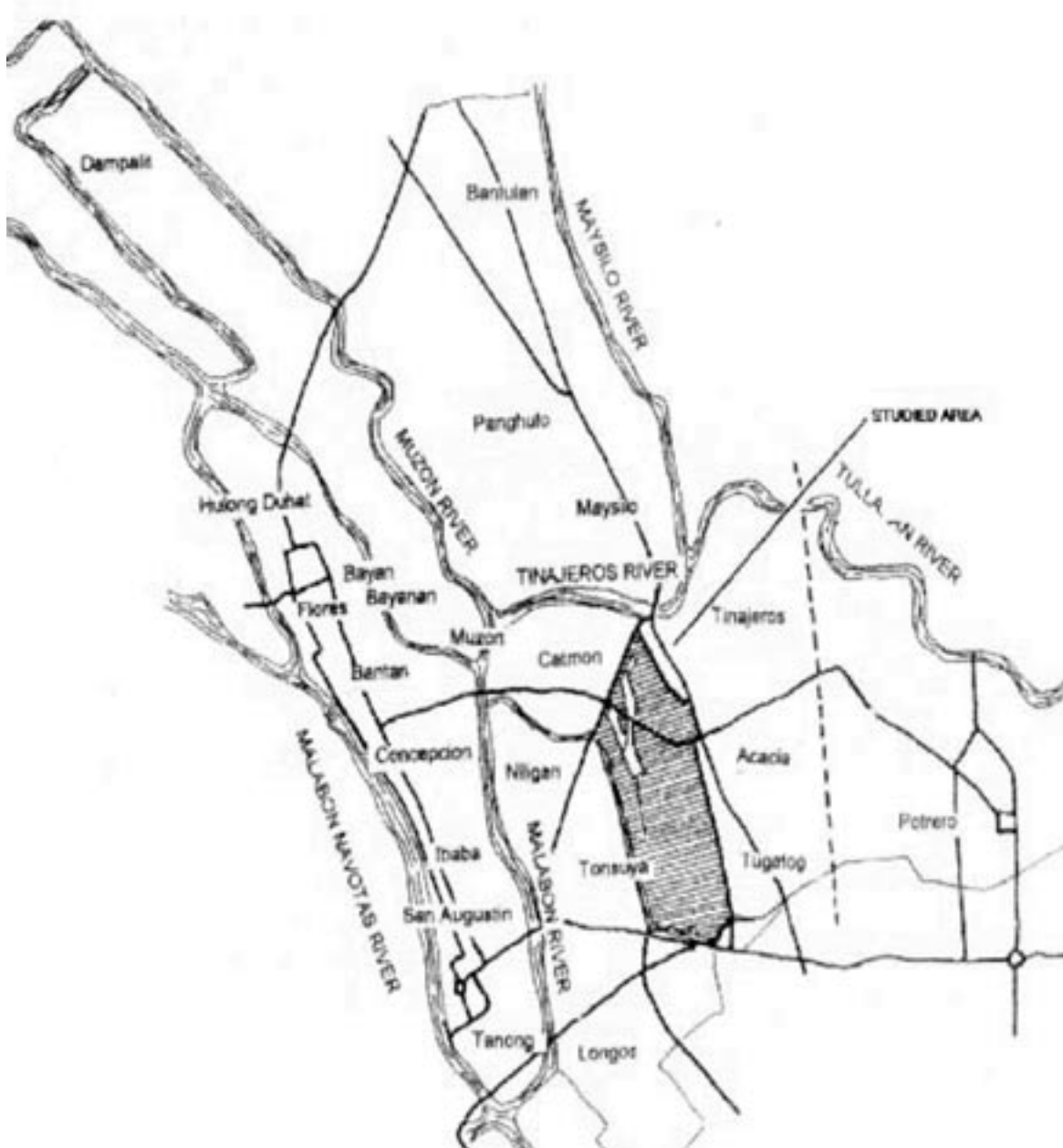
Construction

- To eliminate areas of stagnant water and reduce the amount of flooding events by construction and renovation of 1200 m of drainage canals and alleys in People's Village Phases I and II.
- To improve and add extensions to the drainage system in Paradise Village I and II in order to reduce the inconvenience of run off water in the neighboring border areas of Paradise Village.
- Renovate the Mothers' Clinic in Paradise Village.

Education and Public Awareness

- To educate and increase the public awareness about hygiene, maintenance, environmental problems and solid waste management in the communities of Phases I and II of Paradise Village and People's Village.
- To recruit, set up and reinforce a community group called the Committee on Health and Sanitation who will take responsibility for the hygiene, maintenance, environmental problems and solid waste management in the Phases I and II of Paradise Village and People's Village.

Map of the City of Malabon



- To determine the geographical boundaries of the study area.
- To identify and meet the various public private parties which have to be involved in the program in order to achieve success.
- To increase the understanding of the MSF team regarding the legalization process for the land acquisition.

The following strategies are used in the program:

The program will be carried out in accordance with three complementary and interactive axes: action,

The project has a realistic and clearly defined objective: to build drainage. With this as our support and framework, we must involve various elements of society: the community, local authorities, private companies and associations, and show each one that it is possible to improve the situation of the people who live in hazardous conditions. Construction of the drainage system provides the necessary credibility to mobilize the residents about water and sanitation problems. Public awareness and education are vital to the participatory nature of the work and is essential for the future canal maintenance.

Community participation is the most important strategy for the project. It is essential that the community participate throughout the project to ensure ownership of the project because at the start of the project we want to build partnership with them. Community participation is to be present at all stages of the project: planning, decision, implementation, supervision and evaluation.

The program preference is to work with communities, which is paying for the lot they are occupying through the Community Mortgage Program or through any of the government's scheme of land legalization. Ownership of land will assure

the long-term benefit for the people as well as the maintenance of the project. Moreover, the homeowners' participation is at its best when they know that they are the real beneficiaries of the program and they are part of the development of their community.

The homeowners' association and its leaders is MSF's target partner in the community. However, it is also important to organize and to structure »Committee on Health and Sanitation« from the homeowners' association, which assumes responsibility in the implementation and future maintenance of the project thus capability building of the group, decision - making, supervision and management are installed through training.

Partners

- **Local Authorities**

Networking with the LGU is essential in the project because they have program gaining towards community government.

The City Government of Malabon:

- Mayor's Office
- Engineering Office
- Community Affairs Office
- Health Office
- Planning and Development Office
- Department of Social Welfare and Development (DSWD - Malabon)

- **Other Partners**

Working with NGOs/Sectors/Agencies during the implementation of the program:

- Paradise Village and People's Village:
- LINGaP Foundation Inc. (Lingkuran sa Ikau-unlad Na Ganap ng Pamilya) who introduced MSF in the slum and deals with the social aspect of the project (Paradise Village).
- Department of Public Works and Highways (DPWH - Third Metro) for the construction of the bridge.
- Maynilad Water Services Inc. (MWSI) for the installation of the potable water system in the area (Phases I and II Paradise Village and

People's Village)

- Likhaan Foundation a medical NGO in charge of Mother's Clinic in Paradise Village Phase I.

At present, MSF is tapping other resources for the development of the program. We plan to contact with private consultants, who specialize in water, sanitation and environment. It would be of great help for MSF to work with local professionals, which could carry out the technical evaluation of the project already completed. An appropriate specialist could contribute to a great extent his expertise, new techniques, contact with local network and knowledge of the context and of the problems.

We are also in contact with the academe. We have obtained much information through meetings with professors and students. This develops into public awareness work and advocacy.

Beneficiaries

The beneficiaries are 654 families in Paradise Village Phase I and II with a population 5000 people. In People's Village Phase I and II, our beneficiaries are 511 families with a population of 3700 residents.

Accomplishments of the Program: Paradise Village and People's Village Phases I and II

From June 1998 to September 2001, the water and sanitation program was implemented in Paradise Village and People's Village Phases I and II. In this period, MSF and its partners were able to redesign and reconstruct the bridge that was blocking the existing man made waterway (Paradise Village). We also constructed and repaired the existing drainages and alleys and conducted several trainings on health and sanitation with the community (Paradise and People's Village). All accomplishments were achieved through community participation. Maynilad Water Services Inc.

and MSF were able to work hand in hand in the installation of legal water supply system and the drainage construction. For the future, we plan to implement solid waste management in one of our community.

Indicators of the accomplishments of the program in Paradise Village and People's Village Phases I and II are:

- 1240 meters of drainages were constructed and covered with metal grills. 591 meters in Phase I and 649 meters in Phase II. (Paradise Village)
- 1272 meters of drainages were constructed and covered with metal grills. 698 meter in Phase I and 574 meters in Phase II. (People's Village)
- 934 meters of alleys were concreted. (Paradise Village)
- 1097 meters of main road and alleys were concreted. (People's Village)
- Construction of the entrance bridge to Paradise Village Phases I to VI, Dulong Hernandez (NADHAI) and the neighboring areas.
- 310 families have direct connection of their wastewater to the drainages. (Paradise Village)
- 450 families have direct connection of their wastewater to the drainages. (People's Village)
- 500 families (3750 people) have legal access to potable drinking water. (Paradise Village)
- 522 families (3700 people) have legal access to potable drinking water. (People's Village)
- 300 people from the community were involved in the drainage system construction. (Paradise Village)
- 1020 people from the community were involved in the drainage system construction. (People's Village)
- 180 people attended the trainings on Health and Sanitation. (Paradise Village)
- 110 people attended the trainings on Leadership, Basic Waste Management, Facilitation of Meetings, Policy making for Canal Maintenance and Hands - on for Secretary and Treasurer. (People's Village)
- 350 people attended the focus groups (street meetings) regarding basic health and sanitation. (Paradise Village)
- 250 people attended the focus groups (street meetings) regarding basic health and sanitation.

tion. (People's Village)

- Turnover of the Drainage System in Paradise Village last July 2001 and in People's Village last August 2001.

An improvement of the area can be judged by observation. No litters are around and the community keeps the alleys and main road clean. ■





Public-private-community partnerships in management and delivery of water to urban poor: the case of metro Manila

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Abstract

In the Philippines, the Public-Private-Community Partnerships (PPCPs) are serving the poor with water through public faucets, group taps, bulk water, and individual connections. The removal of technical and institutional barriers in providing water in urban poor communities or informal settlements in Metro Manila has allowed delivery of different forms of water services in these areas. This delivery of service results in benefits to the poor which include access to and availability of safe and better quality water, much reduced cost to households, increased per capita consumption contributing to better health and sanitation, and freed-up time which households now use for more childcare, income earning activities, and even more leisure.

The principal partners in this PPCPs are the government as represented by the residual water utility and the regulatory office as well as the local government, the private sector as represented by the two private concessionaires of the water utility, and the local associations and non-government organizations. Participation of the different parties ranged from small, informal and immediate as in the contribution of labor or mobilization of a community, or capability building and empowering of a community, to more substantial, formal and continuing such as the concession agreement between the water utility and the private concessionaires, the management of a mini water distribution system or a billing and collection contract.

There are indications and good reasons to believe that provision of water for the poor and poor communities can be a potent tool for alleviating poverty as it impacts on health, income and consumption, and gender and social inclusion. In this sense, the PPCPs which are delivering water to the poor are contributing to poverty alleviation. The valuable lessons learned in the case of Metro Manila maybe operationalized and improved to comprise good practices applicable to other water utilities in other areas.

Introduction

Residents in major poor communities in Metro Manila are often illegally squatting on private or public lands left vacant either because they are reserved for future use or are isolated, dangerous or unhealthy and lacking in basic infrastructure. These squatters are as a policy excluded from formal provision of basic social services. In place of formal provision of a basic service such as water, criminal gangs and profiteers operate a distribution system which takes advantage of this lack of access to the legal system. In these poor or unserved communities, the vulnerable groups are getting lower quality water often from water tenders or vendors sourcing legally or illegally from the Metropolitan Waterworks and Sewerage System (MWSS) main lines or from private wells which are several times more expensive. Two household surveys conducted in 1995 and 1998 in Metro Manila by David and Inocencio (1996,

1999) indicated that the majority of low-income households do not have individual piped water connections but are mostly relying on vended water. Thus, many poor households live in areas within the pipe distribution network but are still not served by it.

With the forged public-private partnership in the privatization of MWSS, some policy changes have been effected in provision of water in poor communities. Because the poor in major squatter areas were technically not illegible to apply despite indications of interest and in some cases filing of application forms, illegal tapplings in these areas are prevalent, thus contributing to non-revenue water (NRW). Encouraged by the experiences in other countries which show that serving poor communities can make good business sense, the private concessionaires came out with special water supply programs intended for these communities. These programs which provide water connections to the poor contribute to reductions in NRW and increases in revenues, and at the same time also address the service coverage expansion targets. The nature of service innovations introduced through these programs in squatter communities varies from individual connections to a shared meter to public faucets which deliver water by hose to a bulk water for a whole community.

This paper reports the different forms or types of water (and sanitation) services provided for the urban poor, highlight the public-private-community partnerships forged in the provision of services and the role of each partner, and draw some lessons which can be used in improving said services and replicating them in other areas. To achieve these objectives, key informants were interviewed as well as a number of households in selected major depressed areas. A focus group discussion was held in one poor community which benefited from the water connection program of one concessionaire to add on to the information obtained from individual households and also validate what the private concessionaire claimed they have done.

Where Are the Poor Getting Water?

Prior to the MWSS privatization, the poor in depressed areas in Metro Manila obtained water mainly from water vendors and public faucets. Today, while vended water and public faucets remain, group taps, bulk water and individual connections are already available.

1 Vended Water

- this source continues to be important even after privatization
- it is, by far, the most expensive water with prices ranging from about P100 to P250 per cubic meter (cum)



A water vendor which uses a tricycle to deliver water in 20-liter containers from a roadside source.

- its quality is doubtful as water may be sourced from illegally tapped mains or lines of MWSS or from a shallow or deep well that can be contaminated
- it is the least convenient source since water is either picked up from the source or delivered by a water carrier in 20-liter containers using a wooden or metal pushcart, bicycle, tricycle or jeepney with a small water tank

Metro Manila Water Supply System Concession Service Area



Source: MWSS Concession Agreement

2 Public Faucets

- the old MWSS served depressed areas mainly with public faucets
- the private concessionaires continue to serve unconnected households as the MWSS concession agreement provides for the establishment of public faucets with no installation charges for every 475 people within depressed areas (one faucet serving up to over 50 households) that are not yet given piped connection
- Maynilad has a total of 402 public faucets while Manila Water has 533
- they are less expensive than vended water with prices ranging from about P25 to P50 per cubic meter while the water tender pays the east concessionaire P3.98 per cubic meter
- these are either managed and operated by an individual, barangay officials or community associations/community-based organizations

3 Group Taps

- group taps are installed through the «Tubig Para sa Barangay» program of one concessionaire where land title requirements are waived

and connection fee installment is allowed up to 3 months

- 2 to 5 households form groups and share one mother meter and may opt to install individual submeters with one household acting as the leader doing collection and remittance of payment to the concessionaire
- Manila Water already has 6,577 connections (including some individual connections) as of December 2000 official figures
- water is less expensive than from public faucets at an average price of P5.08 per cum



The picture shows the mother meters of the group taps provided by Manila Water in Barangay Old Balara, Quezon City (photo is courtesy of Balara Business Area, Manila Water Company, Inc.).

4 Bulk Water Supply

- community-managed water connection
 - one concessionaire introduced this to squatter or poor communities as an alternative to group taps
 - requires active participation of the community
 - a community-managed mini water distribution system that serves its members through metered pipes and is billed as a single account with one mother meter for the entire community
 - the community does meter reading, billing, and collection for all its member-households who were each given individual connections with respective submeters
 - cheaper than vended water but more expensive than group taps at an average price of P6.24 to P6.65 per cubic meter. Final prices to house-

holds are a little higher than what the community pays the concessionaire since the community pays for its meter reader, billing and collection activities, and token honoraria for the overseers.

b) privately-managed water distribution

- a private subcontractor provides some water infrastructure investments required to distribute the water it gets from one concessionaire
- serves areas not yet given individual connections due to remaining institutional problems and bears a substantial amount of risk, as demolition can occur anytime and the local government cannot guarantee anything
- resells water to households at rates a little lower and more convenient than vended water as distribution is done through long hoses

5 Individual Connections

- «Bayan Tubig» (Maynilad has already 10,200 individual connections as of December 2000) and «Tubig para sa Barangay» waived land titles and spread connection fees over 3 months to 2 years
- this is the most convenient (no more queuing for long and/or odd hours) and the cheapest, with the average price to households in the east sector of P3.08 (and about twice as much

in the west sector) for a 30-cubic meter consumption in one month

- households pay the same price as all the rest in a service area

Forms of Partnerships and Benefits Gained

Private sector participation in the water sector in the Philippines has encouraged various partnerships in water provision for the urban population especially the urban poor. With the privatization of MWSS in 1997, different forms and levels of partnerships became instrumental in extending a basic service to poor households. A number of important lessons can be gathered and learned from them in terms of addressing the needs of the poor and poor communities and alleviating poverty in the process:

One is the public-private partnership exemplified by the relationship of the MWSS and the two private concessionaires. Another is the private and community partnership between the concessionaire and the community, with the latter represented by community associations and leaders. Partnerships with the communities can range from formal (forged through a mini water distribution system or a water bill collection contract or the sanitation and sewerage project provision of land) to less formal that mainly involve the community at the beginning of the project implementation. Another partnership is that between private (Manila Water of Maynilad) and local government where the latter is represented by the barangay officials or the municipal/city officials. Yet another level is that of private, nongovernment organizations (NGOs) and community partnership as in the case of a Maynilad project in a Malabon village where the NGOs were instrumental in facilitating connections and providing a sanitation and drainage system. Private-private partnerships where the other private party is a subcontractor, and private (subcontractor)-local government unit (LGU) partnerships are also other forms of partnerships in the provision of water for the urban poor.



Battery of water meters just under the electricity meters.

In almost all cases, both concessionaires have to work with barangay or area association officials. Most of the coordination and linking is done with the barangay and/or association officials who do the community mobilizing so the concessionaires can have the opportunity to market the service, i.e., explain the project, convince the community to unite and cooperate in the project by agreeing to regularize illegal connections, and extending all necessary support. Barangays also give endorsements for the issuance of an environmental certificate of conveyance (ECC) by the Department of Environment and Natural Resources (DENR) which facilitates the granting of ECC.



Community meeting conducted by Manila Water staffs (photo is courtesy of Balara Business Area, Manila Water).

The roles of the city/municipality is mainly in giving permits to dig and fill. In some cases, the city/municipality shows more support by granting global permits which greatly facilitates water project. In other cases, the municipality/city waives the excavation or digging fees while the barangay may also forego the permit fees. Sometimes, the city/municipality provides financial support for some materials as in the sanitation and drainage project in Malabon or in the water projects of Manila Water in Marikina and Pasig.

Meanwhile, the NGOs' role is primarily on information, education, and communication campaigns as well as community mobilization.

While the partnership by Manila Water with another private entity in water reselling is far from ideal, it made possible the provision of an alternative source of water for certain communities after the MWSS was privatized. The alternative source serves as an improvement to the existing provision in the area served. The private partner shouldered the investment requirements to put up storage and preservation tanks, pipes and faucets in distribution points and long hoses that reach bathrooms and kitchens of households which otherwise would have a long wait because of the large capital required to bring better water service to households. Note that the area was serviced before by public faucets which were decommissioned by the old MWSS because of the nonpayment by the barangay officials operating them.

On the whole, the form, level and degree of partnerships formed differ from area to area depending on the local conditions. Participation of parties can be small, informal, and immediate as in the contribution of labor and construction materials, or mobilization of the community, capability-building and empowering of the community, or can be more substantial, formal and continuing such as in the management of a mini water distribution system or a billing and collection contract.

Benefits from the Partnerships and Factors for Their Success

From the interviews of households and the focus group discussion, it is clear that the serviced households have benefited in terms of: (1) access to and availability of safe and better quality water; (2) much reduced cost of water per cubic meter; (3) increased per capita consumption which is higher than the 30-70 liters per capita per day average for households buying from vendors; and (4) freed-up time from queuing which households now utilize for income-earning activities, caring for the children and more leisure. For households still without connections in depressed areas but were served by the water projects of both conces-

sionaires, the benefits were in terms of slightly reduced prices (in some cases) and greater convenience since they do not have to walk far anymore to get water. Moreover, there is hardly any queue since they now buy from households just next to them.

The above benefits to the poor and poor communities have been realized through the relaxation of earlier stringent technical and institutional requirements such as the waiving of land title requirement and allowing of installments in the payment of connection fees spread over 3 months to 2 years in providing water service connections by both concessionaires. In turn, such policy reduced cost of connection and paved the way for regularizing illegal connections in squatter communities which in turn resulted in reduced non-revenue water. This differentiated service approach (adapting technology) for the poor raises the quantity as well as quality (relative to the time before provision) of services delivered in poor communities.

Meanwhile, the success factors in local community participation and partnerships in water and sanitation and sewerage services provision include the (1) presence of a strong NGO or people's organization (PO) that contributes to the implementation of water projects in the depressed areas, and (2) cooperation and support from the barangay officials. In instances where there was some resistance from certain parties who were operating the public faucets or running the illegal water distribution, the majority of the community members provided support and protection to the construction workers with assistance from the local police.

For specific Maynilad projects, what contributed to their success were the (1) effective coordination with city and local officials; (2) effective information dissemination to the beneficiaries of the Bayan Tubig Program; (3) cooperation from the residents; and (4) gaining of public confidence by making good the promise to provide water (Maynilad 2001).

Poverty Alleviation and Water Provision

There are indications and good reasons to believe that provision of water for the poor and poor communities can be a potent tool for poverty alleviation. Lack of water and sanitation impact on poverty through four channels: (1) health; (2) education; (3) gender and social inclusion; and (4) income and consumption (Bosch, Hommann, Sadoff, and Travers 2000). In the case of the poor in Metro Manila, the lack of water and proper sanitation has certainly affected income-earning potentials due to time spent in collecting water that could have otherwise been used for more productive activities, or due to poor health, or lack of opportunity for businesses requiring water inputs. As gathered from the interviews of poor households, the provision of water by the two concessionaires has given them not only water but more time in their hands. In addition, while households used to spend so much on water and divide whatever is left for all the other basic needs, with their reduced water budget now, households can spend more money on food and the other needs. In the squatter areas in Metro Manila which have been given water by the concessionaires, the sprouting of small or micro enterprises is striking. For instance, in one Maynilad Bayan Tubig project which serviced a group of households along a creek in Manila, a candy-making business, which requires substantial water input, is said to have flourished with the current availability of clean and reliable water.

In the water projects of Maynilad, the collaboration or partnership directly contributed to employment through the concessionaire's agreement with its private contractor to hire local workers in the project construction, design and supervision of the work. In this sense, the provision of water contributes to poverty alleviation, albeit in a non-sustainable manner. The livelihood opportunity for the community-based organization that will be implemented through the billing and collection contract may be more sustainable and will benefit not only a few workers or households but the whole community itself through the commu-

nity projects that will be undertaken by the association from the commission or payment from Maynilad.

With regard to social inclusion, the residents in the poor communities that now have water connections feel that they have become a legitimate part of society, receiving the same services that the rest have been enjoying. The water service has given some sense of self-esteem and has encouraged many to pursue further improvements in their standard of living as evident in the changing of house structures into more permanent ones and maintenance of a cleaner environment.

Opportunities for Improvement

To ensure that the benefits gained from the partnerships are sustained and even improved, areas for refinement and strengthening must be considered.

On Partnerships. In the case of the community running a mini-water distribution system, there is a need to properly empower the community association while at the same time provide it with the right incentives to make the arrangement more equitable and sustainable. Specifically, discounts for technical losses may be granted. The discount should take into account the reduction in nonrevenue water plus the savings in the billing and collection costs on the part of the concessionaire. An example, which has been applied in computing charges for public faucets, is the 10 percent reduction in total consumption of the community.

The MWSS regulatory office should also be able to monitor prices charged by the major partners of the concessionaires in distributing water, and if necessary, regulate. Part of the empowering and capability-building is the technical assistance in tariff-setting and subsequent adjustments. In the longer term when the service area is almost completely served, however, the concessionaire can choose to take over the operation and convert the mother meter or bulk water into individual connections. An alternative option would be to charge the community the price which would approximate indi-

vidual connection charges so members would not be paying at least twice as much. The point is that while the immediate and deliberate effort to serve the poor is laudable, there should be plans and preparations for more long-term arrangements.

At present, the private subcontractor distributing water in «high» risk areas has unregulated price. A system must be set up to regulate prices by retailers of this type especially if water being distributed is obtained from one of the concessionaires. In the present set up, the MWSS Regulatory Office is tasked with monitoring and regulating prices charged by the concessionaires with the basic idea of protecting the consumers from monopoly prices. Since the prices charged by the private subcontractor are borne by the final consumers, they must then be regulated to ensure that reaping of monopoly profits is not merely passed on from the private concessionaire to the private subcontractor. However, regulation must be balanced with enough incentives for private subcontractors so that they are encouraged to continue to provide capital investments and bear more risks. This type of arrangement is especially relevant in areas or communities where the concessionaire is not willing to go into because of too much risk exposure or high initial investment/infrastructure requirement.

With the disadvantage and higher cost of billing and collection in squatters area, going into a billing and collection contract with an area association that has a tested track record appears to be promising. First, the contract will minimize cost as well as the risks on the part of the concessionaire. Second, it may also serve as an incentive for the community, through the association, to protect the concessionaire's interests by reporting leaks and illegal connections to minimize nonrevenue water.

On Water Pricing. The present rising block tariff structure which applies an increasing unit charge to successive blocks of consumption is supposed to ensure that a basic level of consumption is affordable to all consumers while providing a strong incentive for conservation at high levels

of use. This principle of the progressive water price structure of MWSS water, however, ends up having regressive effects on the poorer households who have to rely on shared water connection or bulk water with residential rates or public faucets. Paying for bulk water would mean large total consumption charged with higher rate due to the stepwise rate structure, and the poor therefore pay higher prices per cubic meter of water. David (2000) suggests that the pricing policy must be evaluated more broadly as a means of establishing the correct level of incentives so that adequate water, sewerage and sanitation service may be provided to all at the minimum cost and the price the consumers are willing to pay. For equity, an adjustment formula to connections serving multiple dwellings especially in poor communities may be applied to approximate average price for individual connections. However, given the complexity of implementing this proposal, targeting to provide individual connections before the end of concession may be more realistic.

On Role of Government and Regulation. With regard to the impacts of privatization, the initial assessment of David (2000), done just a year after the privatization of MWSS, on the requirements to fully realize the gains of the privatization is still very much applicable four years hence. According to David, attainment of the full potential gains from the privatization will depend on the «ability of the Regulatory Office and the residual MWSS to enforce the contractual agreements such that potential problems arising from possible weaknesses in the contract design and changes in the underlying assumptions, data, and analysis used in developing the contract and the technical and financial bids» can be anticipated and necessary adjustments in the contract and mode of operation be implemented. David further stressed that the «willingness of the Regulatory Office and the residual MWSS to adopt a more integrated and holistic approach in dealing with the inherently interrelated issues of water supply and sewerage planning and operations, demand management, pollution control, and watershed and groundwater protection» is critical. Another important factor is

the «government's ability to undertake the necessary institutional, regulatory, and policy reforms in the water sector to ensure effective coordination of policies and programs and establish appropriate incentive and control structures for more efficient, equitable, and sustainable management and utilization of water» (David 2000).

In practice, the price of MWSS water has been politically determined and ultimately even decided by the President of the Philippines (David 2000). A recent example is the bid of Maynilad to raise its tariffs to cover for foreign exchange losses that amounted to close to P3 billion. Without such increase, the concessionaire's viability is severely threatened. This bid was acted upon only after the May elections. It was deemed a high political risk to raise water prices just before an election as it would adversely affect the administration's party candidates. Still, no final decision has been made as of this writing, with the concessionaire pushing for a large onetime increase while the President prefers gradual and spread increases. This experience clearly illustrates the government's strong intervention in the water sector especially in the case of MWSS which has been historically heavily subsidized. In view of this, the government's credibility as a long-term contractual partner or regulator may become a deterrent for future or expanded private sector participation in water. Credibility is critical to keeping the private sector interest and willingness to invest in the sector.

On Poverty Alleviation. As illustrated in the water programs for the poor with public-private-community partnerships, there are indications that such programs can contribute to poverty alleviation. The valuable lessons learned in the case of Metro Manila may be operationalized and improved to compromise good (if not best) practices applicable to other water utilities in the country. A well designed water and sanitation program that explicitly takes into account the situation and preferences of the poor and the interests and possible contributions of other stakeholders and potential partners can become a potent tool in alleviating poverty. Given a range of choices, many poor households

will prefer individual connections rather than public faucets or vendor type service for convenience and consideration of cost. Providing a range of service levels for different consumer groups that includes a low-cost approach should be aimed in the immediate term. The approach should offer innovative engineering and community involvement. However, there should be plans and preparations for more long-term water provision that should be more equitable and sustainable.

Community support at the outset of the project can facilitate design and implementation. Thus, the extensive experience of NGOs in mobilizing community participation in depressed or poor communities should be tapped.

Conclusion

Finally, a participative type of service based on a partnership with the poor, LGUs, NGOs, and private sector may succeed if partners are realistic and flexible. Partnerships take time to be forged since it takes time to design responses that meet needs and goals of major players. It is therefore clear that partnerships formed in the provision of water, especially for the poor and poor communities, is a continuous process and would «need trust and patience and a willingness to compromise to achieve the objectives» (Franceys 2001). ■



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Manila

Discussion

Introduction

Benjamin V. Carino

Before I open up the floor for some questions and discussions, let me focus on a number of issues, which I hope will serve as a framework for our discussion.

First of all, on the issue of PSP and privatization, I think there is a complete consensus among the papers. I do not hear anyone, even from the Indonesian side, saying that it is not a good thing. There is unanimity that it is a phenomenon and a policy that must be encouraged.

In the Philippines context, there are two major pragmatic reasons to resort to PSP and privatization, beyond the need to mobilize private sector resources.

- The first one is the fact that the government is financially constrained, it is facing very serious financial constraints. Our budget deficit is mind-boggling. Just before I left for Hong Kong, the Secretary of the Department of Finance called me and asked me if I could generate 15 billion by selling some of the assets of the government to cover up some of the deficit. I said this would not be easy since the property market is down, prices are down and that it would not be easy to sell government land assets at this time.

- The other pragmatic reason is that the record of the government, and I do not mind saying this despite the presence of representative from the government in the panel, in managing utilities and services, has been almost like a straight-line failure. One could speak of the Philippines National Railways (it is near bankruptcy) and the public enterprises: they either have gone bankrupt or they are close to collapsing. One could also speak about the Philippines long distance phone system, which was managed by the government for a while.

During that period it was very inefficient. It would take months just to get your phone repaired. Then, of course, the MWSS, and I do not mind saying this in the presence of its own representative here. There was a joke about MWSS in the past: Among households in Metro Manila, only 50% have piped water connections, among households with piped water connections, only 50% have working meters, and among those metered households, only 50% of them are read, and among the meters read, only 50% are billed and among the households billed, only 50% of the amount is collected. This joke reflects the kind of negative perception that people have about MWSS. There is no question in my mind that the concessionaires are now doing a much more efficient job.

There is a downside to PSP, which may not necessarily apply to the water sector, which is in many ways, unique. The concession and BOT models may not necessarily apply to the advantage of the poorest segments of society. In fact, there are some contexts in the Philippine society, where privatization, PSP or BOT schemes have led to a pricing structure that has been harmful to the poorest segments of society. One could speak of road projects, for example. Road projects are done with BOT schemes, but there is a very high toll fee now because a road project is very expensive and « cost recovery», of course, is the name of the game for as long you are dealing with the private sector. In our Medium Rail Transport (MRT) System, some of the proposals would now lead to a price structure, which I think, is way beyond the affordability level of the poorest segment of society. In the case of water supply, it seems to be working the opposite way: that the PSP and Privatization, through the entry of these concessionaires, is leading to a situation where, in fact, the poorest segments of society are benefited.

There is now a petition for price adjustment and this has been a source of controversy on the part

of one of the concessionaires. I think that the reason is obvious. The MWSS was substantially exposed to foreign exchange risks, and this raises the question of the advisability and soundness of funding a social service, a service that is supposed to be socialized to begin with, through foreign loans. You borrow when the foreign exchange rate is 26 to 1, and before you can pay the loan, the exchange rate is 52 to 1. So you are effectively doubling the amount of the loan, and that eventually has to be passed on to consumers.

More basic concerns, at the level of the LGUs. I liked the point raised by one of the panelists, who said that economies of scale could be achieved if the LGUs did not operate on their own. In other words, LGUs should not try, especially smaller LGUs, to solve the problems all by themselves. It makes a lot of sense for LGUs to cluster themselves and some clustering arrangements would be made in dealing with the water supply problem. I think that there should be a lot of economies of scales to begin by doing that. It is not feasible for LGUs to be trying to solve their problems on their own, especially the smaller LGUs. Local autonomy should not be a hindrance to collective actions by the LGUs.

Some of the problems that the LGUs confront simply defy political boundaries. In Metro Manila, one could speak of the pollution of the rivers. There is no way that you can solve the pollution of the passage rivers that cut across political boundaries without all the LGUs cooperating. There is no way you can solve the traffic problem without all the LGUs coming into some agreement on how to deal with it. The road system in Metro Manila simply cuts across the fractionated political structure of the metropolis.

At the LGU level, I think one of the papers raised the point that they just do not have the financial resources to be able to manage the water system. I think the flip side of this argument is that the LGUs are not doing nearly enough, (one could perhaps exclude the fourth and fifth class LGUs) in improving their tax collection. The local government code, which is the code that devolves

substantial powers to LGUs, also devolves substantial taxing powers to LGUs and the record is that the LGUs are not exerting nearly enough efforts in improving their financial standing. Many of the LGUs rely only on the so-called IRA, Internal Revenue Allotment, which is a national allocation from the national government. The ratio in most LGUs is something like 80/20, 80% allocation from the national government and only 20% local revenue. I think, that this ratio could easily be reversed because there are now a few cases in some municipalities, Calamba, for example, where the ratio is reversed: 20% national government allocation and 80% local revenues. In our own studies, we have found out the LGUs have simply developed a dependency syndrome. They simply rely on the releases from the national government, and they are not doing a good job of improving their tax base and collecting revenues that are due to LGUs.

Also, on institutional arrangements, I would like to raise this question: was it really a good idea to divide Metropolitan Manila into 2 zones for the concessionaires? I know the main reason for coming up with two zones, with two concessionaires independent from each other. Was it a good idea to do this from the perspective of economies of scale and the need for coordination? I do not know. I know the purpose of having two concessionaires is to avoid monopoly and to encourage competition to some extent. But there is some perception of inequity on the part of the public in the sense that those in the West sector say, «Why are we paying higher prices than those in the East sector?» To me the reason for that is obvious, the West sector is older, that means older pipes, older infrastructure and, beyond that, bigger population. This is not easy to explain to the consuming public. They belong to the same metropolis, why are there differences in standards, services and even pricing? I think that this is an issue that has been raised by many consumers. On hindsight, I do not know if it makes sense to have two zones rather than simply to have given it to one concessionaire, given the fact that the metropolis is a single, social and economic unit.

Finally, the point that water supply must be related to other services, water supply cannot be treated in isolation, it should be part of an overall urban development plan, and this is where capacity building comes in. The LGUs in the Philippines are now required to submit a so-called comprehensive land use plan, and only 10% of them have complied with this requirement. I think that the provision of water supply services must be related to an overall plan of the municipality and specifically, it must be related to projections of land uses or an overall land use plan.

This morning I raised a point with some of my colleagues: what is wrong with limiting piped water to so-called class B water, not necessarily drinking water, potable water. The point is that there are at least 3 reasons for this perspective I hear from water experts. One is that we are wasting a lot of good drinking water for flushing the toilets, laundry, washing the car, etc. You drink the water, you spend a lot of money chlorinating it but then you use it for flushing the toilets etc. The perception is that piped water is not clean in any case. A lot of Metro Manila consumers are not drinking MWSS despite assurances that it is potable. There is always that fear that the pipes are old that the water is colored, and even if we say the water is potable, they rely on bottled water. So, people play it safe. The other reason is the cost involved in treating the water. You need to have bureaucracy, treatment plants, chlorinating processes, etc.

Discussion

Foreign loans, local loans?

Question: how is the decision made to go to foreign loans or to local loans?

Perhaps local loans are done in the case of scarce scale or amount of the capital required by some Water investments (Tubig Water for example), which are probably much less than what is required by MWSS. In the case of Tubig Water (local loan), it was possible to manage well despite the financial crisis because since the beginning of the operation, they tapped the local banks instead of going to foreign banks. Is it possible for smaller capital requirements to go to local banks than go for foreign financing?

Benjamin V. Carino

I was not raising this issue as a policy of the concessionaire, but as a policy of MWSS in the past. I think that MWSS, before the concessionaires came in, really relied on substantial foreign loans for financing some of their infrastructures investments. Given the current exchange rate, I can understand the request of one of the concessionaire for a price adjustment.

Marie-Alice Lallemand Flucher

I am from the bank DEXIA, and we offer loans for local infrastructure boards. When you finance local infrastructure, the best would be to find local loans, in the domestic currency because repayment will be done from tariff in local currency. But when you did a big amount of credit for big investment like the investment you did in Metro Manila or in Jakarta, then you cannot find any long-term loans in the country and you have to mix local loans, domestic money and hard currency. You just have to make a good combination between both. For the time being, for instance, all banks are not lending much to Asian countries because we think that our loans are at the market rate, and they are too heavy for local infrastruc-

tures in your countries, so we are just waiting for the situation to be better, to improve and then we can again mix local loans and foreign loans. There is a good point for Philippines, because you now have a development bank and specialized banks giving loans for local infrastructures. They can give in local currency and we are working with them on technical points, to help them to improve their process and then to give loans locally. It is always better to have domestic money as we have created in France to give loans to France and it is beginning to work very well. This experience can be used for foreign countries but we always try to work with a local bank, because it is the best way.

Tariff, tariff adjustments

Question: is the tariff really favorable for the poor?

Lisette Provencher

47% of the poor people is connected to network, which is quite high actually; it does not mean they are connected directly to Maynilad network, it can be a private network or they can be indirectly connected meaning that they either share connection, or they buy from the neighbors or something like this. We have 30% sharing a connection, 7% using public faucet, and 32% supplied by neighbors and vendors. More important, if we look again for this population, we saw that when they are connected to Maynilad network, they consume 27 cubic meters per month. When they are not connected, they consume 8 cubic meters per month. In a survey done in 1999, we learned that those people who are connected were paying 2.80 dollars per month. When they were not connected, they consumed less and they paid much more, 6.60 per month. Of course, the personnel income dedicated to water was higher, up to almost 5% when they were not connected and, compared to the cost of per cubic meter, of course there is a big difference by being connected or not being connected. So, I think that in fact the poor people

can pay for water because they already pay a lot for water. In addition, when they are connected to the network, they have good quality water, which is not the case when they buy it from vendors or other sources.

Previously, again this is very specific for F. Carlos, 40% of their potable need water was coming from public faucet, and they used to have one hour of water every other day, and they used to pay 225 pesos per month per household. The difference for their water need, they took it from water vendors, so they used to buy 200 liter drum and they would pay 750 to 900 pesos per month for this water, and of course they used shallow wells and rainwater. So, if we look more specifically at the case of F. Carlos, the difference between being connected and not being connected is much greater because before they were spending 125 pesos per month and once they are connected, they spend 74 pesos per month including all the sewerage, sanitation and all of this.... The project was implemented in 3 months and we have something like 880 new customers in this area.

Arlene B. Inocencio

As shown earlier, in fact, charging a lower rate for the first block, or the first ten cubic meters and below is not necessarily benefiting the poor because of the shared connections which put the poor households in say 40 cubic meters or higher consumption level. Effectively, the poor are paying the higher price per cubic meter with the consumption of the two or more families registered in just one meter. I think the point here is not the need of the poor for a subsidized price because before privatization they were already paying much more than those connected - up to 10 times to 20 times more by buying water from vendors! After connection, which occurred with the privatization, the price households in squatter communities pay was definitely several times lower than it before privatization. In the case of shared connections, the subsidized price for the first 10 or 20 cubic meters does not benefit the poor at all. I would even argue that providing subsidies can be anti-poor because the low or subsi-

dized price means fewer revenues for investment for service expansion. Privatization is now providing water for more people including the poor and while increase in coverage is not that substantial yet, a segment of the poor has now access to this piped water paying much lower prices than they used to pay.

Unnamed speaker

I just want to give an example of tariff in water. It is in South Africa where everybody pays the first amount of water at the same price. Then, the bigger is the amount, the higher is the tariff because we think that rich people consume more than the poor people. Maybe that is an experience we could experiment somewhere else.

Col. Angel Efren J. Agustin

Question: this morning in the Jakarta presentation, it was told there was no tariff adjustment because of political intervention? What about the Manila case? Within 3 years, what the percentage change for the tariff adjustment? Is there a lot of flexibility for you to change the tariff?

Tariff Adjustment: Per our Concession Agreement, and it has been made known to the people that there would be no price increase for the next five years. However, there is a provision in the Concession Agreement that allows the Concessionaires to ask for extraordinary price adjustment (EPA). This request should be submitted to the Regulatory Office (RO) not later than the 31st of March of each year. The EPA petition should be based on any of the 11 grounds provided in the Concession Agreement. These grounds are extraordinary events that occurred in their operation such as foreign exchange rate problems, change in law or regulation, etc. All these grounds will be discussed by the RO and their merits evaluated. The collegial decision of the Regulators will be submitted to the MWSS Board of Trustees for approval. If the concessionaires will disagree with the decision, then we go to arbitration. The latest increase, which has been a bigger problem to the Regulators and the MWSS management, was made to save to save the privatization because one of the concessionaires is on the verge of collapsing.

Lisette Provencher

Just a point to explain when Mr. Agustin was saying that we were just about to collapse. That is right. We were in a situation where the revenue of the concession was lower than what we had to refund for the financing of the debt. We do not talk about any rate of return here.

Col. Angel Efren J. Agustin

If we let go off this concessionaire, who will operate the concession? No businessman would take over a business that is losing. Assuming somebody agree to takeover, there would definitely be a scheme for higher tariff than the existing one. Possibly higher than the one the concessionaires are requesting.

Benjamin V. Carino

I think that point here is that the regulation is very critical but at the same time it is a very delicate balancing act. You, obviously, cannot over regulate especially the price structure to a point where your concessionaire would collapse. But on the other hand, you want to protect the consuming public. So, these are two things that you must balance in any type of regulation activity.

The Regulatory Office

Kris Tutuko: in the normal conditions, who is responsible for not increasing the tariff?

Col. Angel Efren J. Agustin

The determination for increasing or decreasing the tariff is the sole responsibility of the Regulatory Office. The result however is subject to the approval of the MWSS Board of Trustees.

Benjamin V. Carino

The quick answer to the question really is that there's supposed to be no price adjustment in the next 5 years under normal conditions. It is only under extra-ordinary conditions that price adjustment should be considered.

Manfred Giggacher

You said that one of the major challenges for the future perhaps is that you are going to try to create or achieve independence for your Regulatory Office (RO). So, what are the ideas that are being discussed about achieving that independence? As has just been said, the balancing act is a fine tuning act and it is very critical.

Col. Angel Efren J. Agustin

We were employed by virtue of the Concession Agreement, we were hired as Regulators because it is in the Concession Agreement. Our security of tenure is also defined in it. We can be removed from our position only by the decision of an Appeals Panel. Lately however, two regulators have been asked to submit their resignation because of loss of confidence. My colleagues are still contesting this. The only way by which we can really be independent is through legislation. Right now we cannot exercise full independence because as I said we hired through the Concession Agreement whose provisions are subject to different interpretations by the Concessionaires and MWSS.

Kris Tutuko

- 1) Is the decision from the Regulatory Office final and binding to the private partners and the government or not because your presentation mentioned a dispute that went to arbitration. Who is the winner?
- 2) Before PSP, the operator is the government water supply company and what is the role of the government with the supply company? What is the status of the employees of government's water supply company? What is the solution for poor people in order to pay lower prices and do you want to develop individual connections eliminating the all system?

Regarding your agreement with MWSS: Is there any way you could promote transparency to the long-term benefit of the people in the Philippines?

Col. Angel Efren J. Agustin

On the first question: Is the decision of the Regulatory Office final and binding? The answer is yes unless this is questioned in the Appeals Panel.

On the last arbitration, who is the winner? The answer is we won on some grounds but we also lost on other grounds. On the second question: Before PSP - MWSS is a government owned and controlled corporation. Its employees are therefore government employees. There is only one tariff rate. There is no distinction between the rich and the poor. If you consume less, your rate is lower but if you consume more, you will be charge a higher rate. On transparency: As mentioned in the provisions of the Concession Agreement, the RO can ask for any information from the concessionaires which we think is material to our monitoring and evaluation of their performance. Since the RO is a government office, any report that we received becomes a public document. In addition to this, we have the Public Performance Assessment system or PPA and the public participates in the evaluation of the performance of the two concessionaires. I have presented the results of the pilot project but the full implementation will still be on February 2002. This will be a continuous project until the end of the concession. For the public to know how the two concessionaires are operating, we do a Barangay information campaign once a week.

Aloha Samoza

Water Regulatory Commission: We know that in the Philippines, it really takes a long time for a legislation to be passed in Congress. Minimum would be three years and the government has anticipated that this act, the establishment of an independent Water Regulatory Commission, will take at least 3 years. The government is now looking into an interim arrangement, which would clarify the roles of the existing economic regulatory bodies, namely: the MWSS Regulatory Office, the National Water Resources Board and the Local Water Utilities Administration. There is really a need to delineate the responsibilities of these regulatory agencies and define under whose jurisdiction the water utilities will be regulated. We did have a Public Services Commission before, dating back to 1932, whose regulatory functions were transferred to the existing regulatory agencies, but some of which needs to be clarified in

view of the entry of the private sector into the picture. So, we really have to undertake reforms in our regulatory laws.

Overcoming the land title issue for poor people and risks

Manfred Giggacher

Question: I concur exactly with what you said, it is a very fine balancing act that is required.

Concerning the issue of connecting the poor: I am very impressed with what has been achieved in Manila in relation to connecting the poor, especially in relationship to overcoming the land title issue. That is the biggest problem we've got in Jakarta. It is a major hurdle, because normally one of our internal concession requirements, is that before we connect anybody they have to prove that they actually own or legally rent the land on which they live. So, who takes the risk on that because it is a substantial risk, from one day to the next, you can connect an entire impoverished area and make perhaps not a massive investment, but certainly a considerable investment and then, because of some government decision, that impoverished area is demolished, as in some cases in Jakarta today. So, who takes the risks for that type of thing?

Lisette Provencher

On the risks regarding the fact that people can be resettled, the risk is taken fully by the concessionaire. At the same time, nothing in the concession agreement was forcing the concessionaire to do so. We do not do it for charity, we do it because it makes sense from a business point of view. It represents at least 20% of our customers, so it is a market. Once they are connected, they take as much water as the other customers, so they are good customers and we want to reach them. In addition, in many of those cases, we avoid to have illegal connections, not only that with illegal connections, we lose the water, the money, but we also have a big risk of contamination of the network with all those illegal connections running

in the water all around the place. For us, when we take all of this into account, we consider this risk that exists, is a risk that we are ready to take because we think that from a business point of view, it makes sense. Actually, from the short-term experience that we have, the major risk we have seen is not to have those people moved and resettled (because we checked that they will not be resettled in at least a timeframe of 5 years) but it is fire. Because those slums, when fires come in there, they disappear in one night. We had some of those areas which were equipped and then you come there after, and nothing is left. Today, this is more this than the fact that they might be resettled. It means also that we really need to have the lowest cost for the investment, and that is why we make above ground investments, we take pipes that will bring the same service to the people but we try to have the lowest investment cost, so that we can depreciate over 5 years. So if after 5 years, they are moved, that's good because you can equilibrate the cost.

Small scale environmental technologies

Today, we talked about traditional forms of provision, of infrastructure for water. What strikes me, from an environmental point of view, is that the alternatives of small-scale neighborhood-based, both for treatment and provision of water is not being talked about. So, I am wondering whether the large concessionaires that are speaking here or the governments are considering things like solar acoustics, small-scale environmental technologies that are, quite frankly, a lot easier.

Arlene B. Inocencio

Smaller neighborhood-type solutions

In the last year, instead of going for the big infrastructures or sewerage projects, the Manila Water Company, one of the two concessionaires of the MWSS, embarked on a community sanitation type of system for small subdivisions or villages or for medium-rise residential buildings, many of

which were established by the government. This system establishes on-site communal water treatment plants. This project is currently ongoing. So far, this system has been completed in one upper-middle income village of about 115 households. This small treatment facility is now operational and treats the wastewater generated by the 115 households. Of course, I do not know yet how cost-effective this system really is since it is still under observation. Nevertheless, Manila Water has already done all the preparations required including community work, project plans, etc. for the establishment of this communal type of sanitation system in number of medium-rise residential buildings in its service area and is just awaiting for release of WB funds intended for this project.

On the experience from South Africa, perhaps this applies to a number of households in Metro Manila. But as earlier said, these subsidized prices for the first few cubic meters are not necessarily benefiting the poor because in the poor communities many households are sharing connections. What can be done however to improve the plight of the poor, is to at least aim for equity, that is the poor paying the same price for the same unit of water is to address the problem of shared connections.

On formal studies on cost benefits for providing water to the poor, I do not know of any such study. Since the privatization of MWSS took place in 1997, maybe I can show you some indications that there are possible benefits. No quantification was actually done. However, I am aware that those who are benefiting from the programs now, having no water for the past 10 or 15 years, are too willing to pay the price for the piped water which can be used to infer the benefits from such programs. That is, these households must probably be getting as much value in terms of the benefits they obtain from the water connection as the price they are willing to pay which include not only the monthly water fee but also the connection fee. Since the effective price of water after connection is lower than when water was bought

from vendors, the total benefits from exceed the price they are now paying to the private concessionaires.

Linkage between the water supply and the sewerage services.

Manfred Giggacher

I would like to ask the question about the linkage between the water supply and the sewerage services. Traditionally, in the past, when the government was normally providing those services, they usually imposed a tax for sewerage services. On one of my slides (Slide 21 - Balance of Economical Costs) when I talked about subsidies, subsidies were normally funded via the taxation revenues. Normally, taxation revenues are far removed from the actual service that is being delivered. It is a very dangerous situation to be in, because people do not understand the value for service they are receiving. So, I am trying to understand how this pricing on your water bills, including the sewerage components, actually pays for the investment that is needed for the sewerage. Because the investment that is required for a sewerage plan is normally 3, 4, 10 times the investment that is normally required for the water infrastructure. How does one relate that to the actual service as being delivered? Certainly, nobody can be disconnected from a sewerage system if they do not pay.

Lisette Provencher

For sewers, this is something else. Sewers today, when someone is connected to the sewer network, they have an additional 50% on the water bill. There are a lot of problems with the sewers. One of them being the financing of those huge amounts of money. This money has to come completely from the tariff since we do not have any grants. It means that today when people ask us what do we do with the 50% that we have for those connected, those 50% in fact are used for expansion of water today, because this is what we are doing. Tomorrow, when water will be finished and when we will be starting the expansion

of the sewers, it means that the water will be for the sewer. The bottom line question is that the rate you will have, at this time, is it acceptable for the people. So, we are now going through this exercise, because we are starting the rate re-basing exercise to review all those plans and the targets. Of course, we'll have to discuss the targets for the sewers because it means that if you want to make this investment, you need to have this level of increase in your tariff. Are we ready to have it or not? This is really the question. But it is not considered, but it might be considered also, you can have something that is a mixture. You can have grant to decrease the cost you will charge to your customers, if the government wants to increase not that much the tariff; the government can support a part and you can at this moment have a tariff that would be lower to be supported by the customers themselves. But to come back to the final point that is if people will pay or not, actually the problem that we have is that there is a regulation that says that once the sewer is there, people have to connect. Except that they do not connect and no one is enforcing the regulation. And if they do not connect, we do not charge them. So, what we are saying today, not only to the regulatory office, but also to everyone that we meet. For us, this is a priority, if we do not clarify this point, there is no way that we will make investment if we are not sure that we can repay for this investment. And I am not talking about people not paying their bills, I am talking about not being able to bill them because they are not connected, and we cannot force them to connect. So, this is one of the major points with also the general problem of misunderstanding of what are sewers and what is water treatment. I would say that generally speaking, because of ecological trends, all people want to have wastewater treatment. When you talk about wastewater treatment, everyone agrees. But they do not want to have sewers because they do not want to change their internal plumbing system, they do not want to have an additional 50%, they do not want to have their streets opened for 3 years, they do not want to have the disturbances. So, today we do not have really the feeling that people are aware of

what it means to go from 20% to 66% of cover range on sewers, not only generally speaking for the population but we do not also feel a very high political will to do it. Because even if we have the finance, even if we have the money to do it, even if we know how to do it, even if we are ready to do it, if we do not have the support of all the government levels, we will not be able to do it. To make sewers, it creates a lot of disturbance all over the place. Today, to have an excavation permit for water, when you open just half of the street, it is something that is very difficult so if the LGU does not want to support the disturbance that will happen with sewers, we will not be able to do. If the Department of Health does not want to enforce the regulation, we will not be able to do it. If the Public Estate Authority does not help us to find sites, because this is also a big problem, if we want to make water treatment plant, we need to have sites, and to find sites today in Manila is not an easy thing. There are plenty of problems like this, beyond the problem of finance itself. I think we will need to have a huge communication program, not only for the population but also for the political and administrative levels to tell that even if we have the money, even if we want to do it, we will need their full support to do it. This is sure that for the concession of Manila, this is the major part of the investment over the concession is on sewer and I would say that the final success after 25 years will be measured on sewers, if we would have been able to do it or not.

Class B water

Ms. Lye Lin Heng

I just wanted to address a point you made Dr. Carino, which I think is a very good point, which is « what's wrong with class B water?». In Singapore, we have the same problem, we are using class A water for washing cars, flushing toilets... Recently, we have started using class B water for the industries. Of course, we have to establish the system. Because it is a very small country, it is very easy to plan. We have very comprehensive

land use planning, so our industrial sites are very well demarcated. It is quite easy to actually have a treatment plant for water, and you do not have to treat it so well for general industries. So industries use class B water but at the same time we have very intensively cleaned water, triple AAA water for high-tech industries. We have experimented with flushing with used water, bath water ...etc Apparently that did not work. The usual complaint is that because the water is not treated, it starts to smell. I understand that in Hong Kong, they did try to use seawater for flushing toilets. In Singapore, water from the tap is very clean but we have the same perception that bottled water is better. So, we import a lot of bottled water, which adds to our problem of waste. There are tons of plastic bottles and in Singapore, we incinerate almost all of our waste. . The good news is we have just started to encourage recycling among domestic users in a big way. We really have to educate the people and I think that if you speak to the Health Authorities, they always say that bottled water is really not as good as tap water because several minerals are not there. I just wanted to share my experience with you.

Unknown speaker

The overall problem is like this: if you had two networks, one could be with water that is a bit treated or not treated at all, and the other one with better treatment. The problem, in fact, is from the financial point of view. The big investment is on the network; it is not on the treatment. So, it is only in very small territories, like Singapore or Gibraltar (in Gibraltar, they have to make desalination for their water and it is a very small place, they have a double system, a double network). But as far as I know, these are the only places where it is done because it is too expensive to have two networks. So, it is only a financial matter, it is less expensive to treat more water even if it does not need to do so. It is less expensive than to build two networks.

Col. Angel Efren J. Agustin

Of course, the idea of using class B water would be a good idea, but that would be good for those

areas, which are still developing their system. Right now, Metro Manila, for example, has spent so much for the treatment plants. We have 4 treatment plants in Manila. From what we have seen, their expenses for purification of water is very small compared to what they are spending for the development and operations, to distribute this water to customers. And so, it is only for those who are intending to develop their water system, but for a developed system, it may not be a bright idea because of cost and what will we do with the treatment plants, where the government has already put up, as a matter of fact, possibly some of the concession fees they are paying is actually repayment for the loans for the construction of these treatment plants.

Benjamin V. Carino

As you can see, we still have a long road to travel in the Philippines.

As you know, the reason for PSP is that there is some profit. What is the internal rate of return for this kind of project?

The concession fee is defined in the concession agreement and it is not dependent on the income. Basically, it is a fixed amount, and it could only be affected by the consumer price index. We initially started with 100 million per concessionaire and it has increased through the years based on the consumer price index. That answers your first question. ■

