

Improving Water Supply and Sanitation

The water sector in the Philippines is unable to meet the increasing demand for safe and reliable water and sanitation services. Access rates for water supply have actually slipped, the quality of service has deteriorated, and the lack of sanitation facilities continues to endanger public health and the environment. Low investment levels, stemming partly from inadequate cost recovery reflected in the basic tariff; a poor regulatory environment; and a fragmented institutional framework have all contributed to the current state of water and sanitation provision. Allowing for adequate cost recovery in tariffs; quickly resolving financial distress of the Metropolitan Waterworks and Sewerage System; removing barriers to financing, especially for water districts; dedicating a sole regulatory agency for the sector; and clarifying roles of the various players are some of the pertinent policy options for sector reforms.

Background

The water sector in the Philippines is in a state of stagnation and unable to meet the demands of its growing and increasingly urban population for safe and reliable water services. Public sanitation services and solid waste management remain rudimentary and insufficient to provide meaningful safeguards for public health and the environment (see also the *Urban Environment* discussion brief).

Official data on coverage show that only very modest growth occurred over the past decade and access levels for water supply are now slipping. Access to safe drinking water deteriorated from 81.4 percent in 1999 to 80 percent in 2002 for the entire population while the poorest segment of the population's access declined from 71.5 percent in 1999 to 70.2 percent in 2000. An even lower access figure to formal services has been reported by independent surveys, with only 63 percent of the population having access to any of the formal levels in 2000, with the rest relying on self-provision.

Even more worrisome, official data mask the underlying poor *quality* of coverage. Though public data show fairly high formal water supply access rates, less than half of the population and only about 20 percent of the rural population have access to piped water supply and household connections. But where there is access to piped services, the quality of such services in terms of continuity and bacteriological quality of drinking water often

does not meet the standards set by the Government.

For sanitation and solid waste, matters are even worse. Access data for sanitary toilets obscure the fact that effluent from ubiquitous septic tanks commonly drains into uncovered drainage systems, which leaves the majority of the urban population across the Philippines exposed daily to raw sewage. Solid waste collection is ineffective and large quantities of solid waste tend to gather and block drainage canals, exacerbating public health problems. Even when collected, improper disposal practices for both septic tank sludge and solid waste contribute to severe environmental degradation of water bodies across the country and undermine economic activity and growth in various sectors, including tourism.

As a result of inadequate services, contaminated drinking water and waterborne diseases remain a prevalent public health concern, accounting for more than 500,000 morbidity and 4,200 mortality cases a year with avoidable health costs alone estimated at P3.3 billion annually. Economic losses due to water pollution alone are estimated to amount to an annual average of P17 billion for avoidable costs for fishing industries and up to P47 billion for avoidable losses in the tourism sector.¹

¹ Source: World Bank *Philippines Environment Monitor 2003* (2004), World Bank, Manila.

Issues

Modest sector investment

Over the last two decades, capital expenditures have fluctuated around P3 billion–4 billion per annum, almost entirely allocated to the water sector. This is far from the estimated investment requirements for water supply of around P6–7 billion per year to achieve a 90 percent access rate to formal services by 2010 (one of the Millennium Development Goals). Almost no investment has been made to implement the provisions of the Clean Water Act, passed in February 2004, whose annual expenditure is estimated at P35 billion.

Clearly, the current investment levels are inadequate to keep up with growing demand and service targets. And while investment figures indicate an uptrend over the last two years, this is misleading, as the vast majority of this investment was undertaken by two government owned and controlled corporations—the Metropolitan Waterworks and Sewerage System (MWSS) and the Local Water Utilities Administration (LWUA)—both in current financial distress. Without major reforms in the sector, it is likely that capital expenditures will fall below even the low average levels of the last decade.

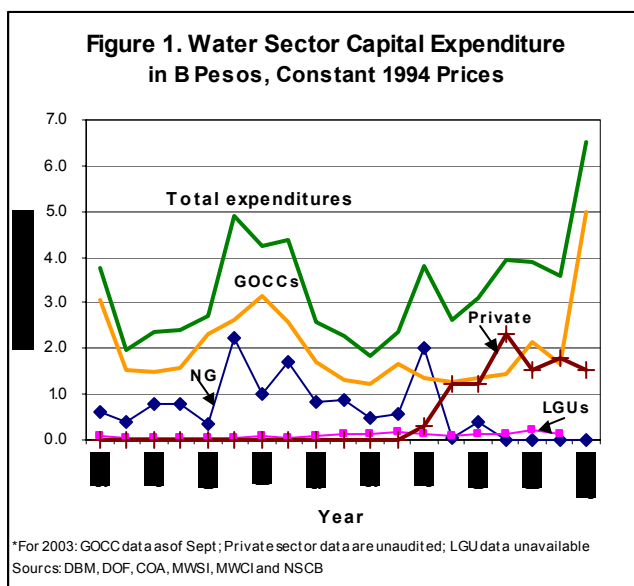
Investments have been heavily concentrated both in the Metro Manila area, where the bulk of private sector investments have been made, and a fairly small group of large secondary cities served by water districts, which have retained access to LWUA financing. Investment outside the main urban centers has been negligible for the last decade.

Public sector funding

Since decentralization in 1991, the national Government has by and large withdrawn from funding the sector—with the exception of congressional initiatives and national government grants for level I (point source) services and a few sanitation initiatives. Despite local government unit (LGU) capital spending doubling since decentralization, investments in the sector remain at very low levels. Around 60–70 percent of local government funds for the sector are used to cover operating losses for water services provided by local governments, rather than new capital expenditure.

The two government owned and controlled corporations involved in the water sector show increases in expenditures and disbursements for 2002 and 2003. They accounted for 76 percent of total investment in 2003, and 53 percent of total sector investment in the last ten years (figure 1). However, both are now facing an acute financial crisis. MWSS, for one, has been borrowing to cover for a default on the concession fees by the West Zone concessionaire Maynilad Water Services in 2001. It remains unclear to what extent MWSS will, in the future, be able to generate enough revenues to cover its loan exposure or to recover arrears for past concession fees.

In LWUA’s case, although it has achieved high disbursement levels over the past few years, new loan commitments have dropped to about P0.5 billion, or roughly the same size as its own operating expenditures. This undoubtedly indicates that the high investment levels in the last two years will not be maintained. Despite improvements in its loan portfolio and



collection, mainly attributed to favoring disbursements to a small number of creditworthy water districts (WDs), LWUA's financial situation remains highly fragile. The practice of passing on funds at more favorable terms than what LWUA could obtain from its creditors has been undermining its function as a conduit for long-term financing to the water sector.

Public sector financing for water projects has mostly been sourced from official development assistance (ODA). The low take-up rate of these funds indicates that the sector's immediate problems are not primarily due to the lack of access to financing but rather to inadequate tariff adjustments (which leads to low tariff levels and correspondingly, insufficient revenues); weak incentives for service providers to pursue viable expansion projects; and capacity constraints to develop bankable projects. Many of these constraints stem from the lack of implementation of stated government policies and reforms.

Nevertheless, financing needs in the medium and long term will go beyond available ODA resources, especially when sanitation investments are taken into account. In this light, the government should reexamine whether or not to utilize ODA flows increasingly to support and leverage peso-denominated financing rather than substituting for it.

Private sector financing

The private sector has become an important source of financing for infrastructure. Though policies have been enacted to induce broader private sector participation, that sector's involvement in the water sector remains heavily concentrated in Metro Manila. Both concessionaires of the MWSS have made annual investments of 40–50 percent of total capital expenditure, which indeed resulted in improved access and service quality for Metro Manila residents. But these investments have been insufficient to meet targeted service improvements, particularly the reduction in network losses, as envisaged in the concession contracts.

The financial performance of the Metro Manila concessionaires has diverged over the last few years. While Manila Water is now returning modest profits, Maynilad Water Services, after incurring losses consistently since 1997, remains in bankruptcy. As a result, Maynilad suspended payments of its concession fees and contractual disputes ensued causing most investments in Maynilad's service area to a halt.

Given the impending restructuring of the Maynilad concession, it is unclear how overall private sector investment levels can be reinvigorated or at least sustained over the next few years. In the short run, the Government faces the risk that the renegotiation could drag on, causing not only further delays in infusing much needed investments for the West Zone but also increasing the perception of political risks for the financiers of the relatively more profitable Manila Water (East Zone).

In the medium to longer term, political constraints over tariff adjustments cast doubt over what level of investments can indeed be sustained. Already, several of the original investment obligations have been relaxed to avoid steeper tariff increases and initial indications from the renegotiation of Maynilad's contract may well require a moratorium on all but the most pressing investments to ensure its future viability.

The experience in the MWSS privatization also highlights the financial vulnerability caused by relying on foreign denominated financing while collecting domestic currency revenues. This exposure, aggravated by the sharp devaluation of the peso to the dollar during the Asian financial crisis, contributed significantly to the collapse of one of the flagship concessions in the East Asia region. Lessons from the MWSS concessions should prompt government to actively pursue solutions for domestic currency financing for the sector, both by encouraging private investments to be financed in local currency and by better leveraging ODA funds to access local credit markets.

Cost recovery an elusive policy goal

The core constraint that undermines the development of the entire sector is the low tariff level, which is not even sufficient for service providers to recover recurrent costs, let alone to accumulate sufficient reserves to fund new capital investments. Despite repeatedly stated policy objectives of cost recovery, actual progress toward this end has been minimal.

For LGU-managed systems, tariffs are insufficient to recover even operation and maintenance (O&M) costs.² As a result, they continue to be dependent on the local government to augment their revenues. The quality and coverage of their service suffer significantly as a result. There is large potential to reduce operating costs at LGU operations, but the small scale by which individual service providers operates contributes to low efficiency.

Though WDs as a whole operate more efficiently than LGU systems and recover their cash expenses (O&M costs and debt service), they still fail to generate sufficient revenues to accumulate reserves (for example, through depreciation charges) to fund any expansion and to attract financing at commercial terms.

Water tariffs are far short of the cost-recovery level, even in Metro Manila. The fact that one of the concessionaires incurred losses while the other made a modest income indicates that tariff revenues are currently insufficient to cover costs, including the concession fees owed to MWSS. Another indication is the failure of the two firms to deliver the improvements laid out by the concession agreements. Though operating efficiency improved markedly, notably for Manila Water, persistently high—and increasing—network losses contribute to rising operating costs for both concessionaires. And while MWSS retained investment obligations under the concession contract for bulk supply to the system, current tariffs do not

² The bulk (60–70 percent) of LGU expenditure continues to go toward offsetting O&M losses.

provide for revenues to ultimately finance and pay for such investments.

Robust regulatory framework still lacking

Critical for sector development is a robust regulatory framework that could provide for a credible and effective tariff adjustment mechanism insulated from short-term political intervention. Such a solid regulatory framework is also crucial to make service providers accountable to consumers with regard to the efficient use of revenues, both in terms of keeping O&M expenditures at efficient levels as well as responding to a clear mandate to provide improved and expanded access to piped water (and sanitation) services. The framework is not in place despite many efforts by the Government.

Perhaps the strongest indication of a missing effective regulatory framework is the lack of reliable and publicly available benchmarking information on the sector. The absence of consistent sector data and baseline figures on the extent and quality of coverage not only undermines the credibility of the regulatory process but also hampers any efforts for improved sector planning and strengthening accountability of national government agencies in the sector.

The sector's regulatory oversight is highly fragmented, with regulatory functions controlled by different entities. This makes it difficult to build the necessary capacity to sufficiently withstand regulatory capture from service providers and political interventions. As a result of fragmentation, regulatory rules and their enforcement vary across different groups of service providers. This is evident in the regulation of private sector contracts. Procedural provisions to tariff reviews and service targets are embedded in concession agreements, thus concessionaires are regulated according to the stipulations contained in their contracts. This is a pragmatic solution chosen at the time of the concession awards in the absence of a more institutionalized framework to review service quality and tariffs that would have been acceptable to investors. Yet a

transparent regulatory process, including regular monitoring and public disclosure of actual service levels, has not really evolved. As part of ongoing renegotiations, it is likely that ownership of Maynilad will revert to the Government. This could further erode the credibility and effectiveness of the regulatory environment.

For publicly owned or community-based water districts, regulatory oversight has now shifted to the National Water Resources Board (NWRB) to address LWUA's conflicting role as both financier and regulator to WDs. However, NWRB has not yet been able to build the capacity and broaden its geographic presence to effectively face the challenges brought by its new mandate. One particular challenge for NWRB will be to change the regulatory process from one narrowly focused on ensuring the financial viability of the sector to also ensuring that expansion and service goals are met.

There is currently no tangible regulatory framework in place for tariff setting at the LGU level (despite the guidance of the National Economic and Development Authority) and the role of NWRB vis-à-vis LGUs remains unclear. In the absence of NWRB's effectiveness in leveraging stipulated tariff adjustments, efforts to strengthen LGU tariff policies need to be embedded in a comprehensive program to reinforce public finances and accountability for public services at the local level.

Institutional framework for implementation of sector policies

The sector is highly fragmented, with numerous small providers that have neither sufficient operational scale nor the necessary autonomy from political interference to be efficient providers. After more than a decade since the provision of certain services was decentralized, LGUs remain ill-equipped to provide water and sanitation services; the limited technical support facilitated by the Department of Interior and Local Government, to bolster local capacity, has also yet to bear fruit. Similarly, the majority of water districts remain too small to attract skilled staff to effectively institutionalize

technical advice provided by LWUA. The relationship between LGUs and WDs remains ambiguous, hampering the incentives for LGUs to provide collateral on behalf of WDs to attract more funding. Various local providers coexist, but operating under different regulatory and financing constraints, thus blurring accountability of individual providers for expanding both water and sanitation services.

Coordination between the various national government agencies involved in the sector also remains weak. Recent initiatives, such as the reform of LWUA, strengthening of NWRB, and the Clean Water Act provide an opportunity to better align sector responsibilities and agencies, but at the same time they present significant challenges to the sector to implement such reforms seamlessly. The necessary financial restructuring of LWUA and MWSS may provide an opportunity to reform corporate governance at these national agencies.

Recommendations

Objective	Short-term actions	Medium-term actions
<p>1. Adequate cost recovery and effective regulatory environment</p>	<p>Issue clear guidelines on charging cost-recovery water tariffs to achieve an appropriate return on assets (National Economic and Development Authority Board Res. No 4/IRR), including implementation and monitoring strategies.</p> <p>Articulate clear policies on sanitation service tariff, and the responsibilities of WDs and LGUs for collecting sanitation surcharges jointly with the water tariff.</p> <p>Review and quickly act on requirements in MWSS for tariff surcharges to fund bulk water investments in the Manila area.</p> <p>Realign budget to enable NWRB to fully function, including transferring staff from LWUA and DENR.</p>	<p>Strengthen incentives for LGUs to adopt cost-recovery tariffs, including making sanitation subsidies conditional on full cost recovery for water services.</p> <p>Revisit the setting-up of a dedicated regulatory agency for the sector.</p>
<p>2. An integrated institutional framework</p>	<p>Implement Executive Order 279, the graduation policy for WDs to private capital markets over time, including its implementing rules and regulations and business plans for the three LWUA business units.</p> <p>Reinforce general education and public awareness-building measures regarding the benefits of sanitation and the insufficiency of individual septic tanks.</p>	<p>Strengthen incentives for LGUs to facilitate amalgamation of small service providers to attain economies of scale and explore Securities and Exchange Commission registration of utilities to strengthen and harmonize corporate governance.</p> <p>Review accountability for planning, construction, operation, and regulation of sanitation infrastructure, including drainage; clarify the roles of DPWH, LGUs, and LWUA/WDs.</p>
<p>3. Enhance sector financing and rationalizing subsidies</p>	<p>Develop and implement a strategy for the financial restructuring of both LWUA and MWSS, to reestablish the financial viability of both entities. Financial resolution for MWSS is particularly urgent.</p> <p>Remove structural barriers for government finance institutions (GFIs) and private finance institutions (PFIs) to extend financing to WDs, including subordination of GFI/PFI debt to LWUA exposure, and the need for, approval by the Board of Trustees of LWUA (waiver).</p> <p>Clarify policy on differentiated terms for public financing according to viability of providers to remove perverse incentives not to “graduate” and review government policy on grants tied to service levels which may distort demand and result in unsustainable investments.</p>	<p>Develop a policy to guide the overall use of ODA in leveraging domestic currency financing, and clarifying the type of credit enhancements available to GFIs/LWUA and PFIs in lending to the sector.</p> <p>Provide budget support for the implementation of the Clean Water Act, and ensure targeting of available sanitation funds.</p> <p>Explore refinancing of current LWUA loan portfolio by GFIs/ PFIs/ capital market in order to broaden exposure of domestic capital market to the sector.</p> <p>Review accountability for planning, construction, operation, and regulation of sanitation infrastructure, including drainage; clarify the roles of DPWH, LGUs, and LWUA/WDs.</p>