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Channels for change: private water and the urban poor

For the rapidly urbanising developing world, safe and affordable water is key to health and livelihoods, as well as meeting the Millennium Development Goals. But providing it demands innovative models. Where the context allows and the approach is appropriate, private sector involvement can generate win-win outcomes. Poor people can gain access to high-quality, affordable services, and companies can gain access to new and profitable business opportunities. Two examples of innovative 'private' water suppliers are the Manila Water Company's Water for the Poor Communities (TPSB) programme, and the Water & Sanitation for the Urban Poor (WSUP) partnership. Both have a multisector approach to service expansion and provision, including partnerships with local authorities; strong community involvement in selecting, designing and operating options; appropriate service levels to reduce costs; and a flexible range of services. Many elements of these models are also replicable.

Policy pointers

- **The private sector** can play an important role in providing safe, affordable water to the developing world's growing cities – and through this, access profitable business opportunities.
- **Approach and context** are key.
- **Proven approaches** include multisector delivery teams partnering with local authorities, strong community involvement, appropriate service levels and flexibility in type of service.
- **Proven contexts** include those in which users are able to pay commercially viable rates, central governments and local authorities are supportive, and an appropriate regulatory environment is in place or can be developed.

Cities and water

An estimated 154 million urban dwellers in sub-Saharan Africa, Asia, and Latin America and the Caribbean currently lack access to safe water.[1] Meanwhile, the world urban population is predicted to increase from 3.3 billion in 2007 to 6.4 billion in 2050,[2] with much of the growth taking place in informal settlements such as slums.

Clean water is a daily need for all city dwellers, but providing services in poor informal settlements is challenging for a number of reasons: the costs of network provision and service expansion, lack of formal land tenure, and lack of space and access for placing infrastructure. New and innovative models are needed if water provision targets are to be met.

Increasingly, it is recognised that meeting the needs of poor consumers throws up potential business opportunities. The markets for water and sanitation services for the 4 billion poorest are an estimated US$20 billion,[3] and many poor urban dwellers are willing and able to pay for a clean and reliable water supply at a rate that makes provision commercially viable. Without a piped supply, these consumers are often forced to turn to private vendors that may sell water at inflated rates.

A key challenge of private sector involvement is identifying commercially viable ways of extending infrastructure and services to poor urban communities that are currently unserved. Mandatory service provision targets can be included in the contracts of private concession holders (that is, firms operating under a long-term management contract from the local authority), but these can be difficult to meet because:

- poor consumers often cannot afford the full cost of connection
- the revenue generated during service provision may not be enough to recover network expansion costs under typical investment criteria
- informal settlements create challenging and costly legal and logistical problems for expanding the service
- disenfranchised poor citizens with little faith in public services/government may be reluctant to engage.

Among other workable solutions, the two case studies presented here (see below) demonstrate how private sector provision can create a win-win situation in which poor people gain access to high-quality, affordable services, while companies gain access to new and profitable business opportunities. While success is recognised to be context-dependent, many elements of these models could be replicated in other cities.

Inclusive innovation

Two innovative models extending water and sanitation services to the urban poor are the Water for the Poor

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Communities (TPSB) programme of the Manila Water Company, Inc. (MWCI), and the Water & Sanitation for the Urban Poor (WSUP) partnership. (See case study boxes, below and opposite.) The Table (page 4) compares the business models for the two cases, while the challenges associated with them are discussed in the following section.

TPSB: water for Manila's poor[4]

Long queues at public taps, privately bought water at 10 times the cost of piped – many poor households in Manila face difficult choices in trying to access clean water. Thousands resort to illegal tapping, with the result that 60 per cent of water leaving the treatment plant is not billed, compared to the industry standard of 30 per cent.

The Manila Water Company, Inc. (MWCI), is making a difference for 1.3 million people – or 214,000 households – in the Philippine capital. This private concessionaire operates, manages and maintains the waterworks and sewerage facilities for east Manila. In 1998, MWCI launched the Tubig Para Sa Barangay (TPSB) or Water for the Poor Communities programme. The TPSB programme offers various service options to poor communities, the most common option being a group tap where two to five households are serviced through one metered connection.

The TPSB programme places a strong emphasis on partnerships with local government and community organisations. MWCI's role includes identifying and assessing the TPSB area, organising and coordinating with the recipient community, implementing the scheme chosen by the community and monitoring daily operations. Local government units (LGUs) and community-based organisations (CBOs) are MWCI's partners in implementing the programme.

Their roles include mobilising the community, deciding what TPSB scheme is appropriate for it, giving endorsements and permits to facilitate construction and providing support to MWCI during project development and implementation. For community-managed water connections, LGUs or CBOs are also responsible for the day-to-day management of the TPSB facilities including repair and maintenance, monthly billing, and collection and remittance of the households' water consumption charges.

The households involved are active decision makers in programme design and operation, and are responsible for choosing the connection scheme and collection arrangement for their community.

The programme has had the following benefits:

- Poor households are able to connect to piped water services because of changes in connection application requirements, particularly the waiving of the requirement for land titles.
- Poor households pay less for their water and payment of fees has been made easier through lower connection fees, varied instalment schemes, reduced monthly water charges, and socialised water rates.
- Public health in poor communities has improved; in particular, incidences of diarrhoea have declined.
- The participatory approach of TPSB has created enhanced social inclusion and community development.
- Putting the poor in charge of their own destiny and giving them responsibility for important aspects of service provision empowers them to improve their quality of life, and builds their capacity to manage projects. Community participation in selecting the scheme improves the likelihood of an appropriate final solution. This approach gives community members a sense of ownership of the infrastructure, which increases the likelihood that it will be well maintained, and hence that the project will be sustainable.
- TPSB has helped MWCI fulfil its service obligations, increase its revenues and improve its operational efficiency (90 to 95 per cent collection efficiency), proving that strong financial, institutional and operational benefits can be derived from pro-poor projects.

Issues and analysis

Commercial drivers Business models require strong commercial drivers to be effective and replicable. The TPSB programme of the MWCI has strong commercial benefits in terms of increased revenues and improved operational efficiency. The proven success of the programme in commercial terms provides a sound basis for MWCI investing further funds in this programme.

Further, the TPSB programme supports MWCI in managing social risk around its investment. By proactively addressing the needs of poor consumers, MWCI reduces the risk of public opposition to their operations. Potential risks should not be underestimated; public opposition has led to the cancellation of contracts elsewhere.[5]

MWCI and WSUP differ from a business perspective in that MWCI is a commercial operation, while WSUP is not run on a fully commercial basis.

WSUP does need to respond to commercial imperatives, however: its viability depends on its ability to raise revenues to cover its activities and to leverage capital funding for the projects it has designed; its future attractiveness to donor organisations will depend on the success of its current projects.

WSUP: a water and sanitation partnership[6]

The WSUP (Water & Sanitation for the Urban Poor partnership) is a multisector alliance bringing together local and global expertise to provide sustainable water and sanitation solutions for poor urban communities. It is now involved in nine projects across eight African and Southeast Asian countries.

Members of WSUP range from large multinationals including Unilever to NGOs including Care and WaterAid, and the UK-based Cranfield University.

Thames Water, the UK's largest water and wastewater services company, and Halcrow, a multinational engineering consulting firm, provide design and project management resources to the partnership at cost price.

The NGOs provide expertise in stakeholder participation, particularly community engagement. The partnership provides support in designing and delivering water and sanitation solutions and mobilising funding/finance to support implementation.

The local service provider, normally the local municipal authority, implements solutions.

WSUP aims to make private, public and not-for-profit expertise available to local service providers to build their capacity to serve the poor, while ensuring the involvement of the community at all stages.

Differing service levels are offered for users' differing requirements. The design is developed within an integrated water resource management framework to ensure sustainability of water resources, and is linked into local community health, natural resource management and capacity building initiatives.

Anticipated long-term benefits include better capacity in local service providers and more sustainable management of water resources.

Key achievements to date include: 83,000 with improved access to safe, affordable water; 20,000 using improved sanitation facilities; 29 local service providers with improved capacity; and over 50 CBOs/NGOs in 22 slums now managing local community water and sanitation services.

The private sector members of the WSUP partnership stand to gain from their contribution despite providing expertise at cost price, for example by demonstrating leadership in corporate responsibility, and enhancing brand and reputation in local and international markets.

Sustainable development outcomes Engineers Against Poverty – a UK-based NGO working in engineering and international development – has identified key characteristics of sustainable pro-poor infrastructure.[7,8] Such infrastructure:

- provides access for the poor to affordable services that meet their basic human rights and needs, reduce their vulnerability to natural disasters and allow them to participate in economic activity
- supports substantive freedoms[9] for individuals and communities to participate in decision making that affects their wellbeing and livelihoods
- minimises the consumption of natural resources and the impact on biodiversity and natural systems
- boosts the creation of employment in construction, operation and maintenance
- is economically and operationally sustainable in the long term
- is designed and operated through holistic consideration of social, environmental and economic costs and benefits.

Both the business models discussed here perform well against these criteria. They provide affordable services and empower communities to participate in decision making processes; they expand employment opportunities in construction and operation, and require operational sustainability as a key component of project design. Both conserve natural resources by integrating expanded service provision into the existing municipal system, creating economies of scale and using scarce resources efficiently.

Challenges Project selection is often driven by where the model will work, rather than by the needs of the poorest and most vulnerable. Where there are large underserved populations and high levels of poverty, other mechanisms of service delivery are likely to be required.

The success of these models is dependent on a supportive regulatory environment. The TPSB programme relied on a waiver of land title requirements for connections; the WSUP programme bases project selection partly on an assessment of the regulatory environment. These regulatory constraints highlight the role of government in implementing appropriate policy measures to support private involvement in water and sanitation provision. Where governance is weak and regulatory frameworks poorly developed, including targets in agreements with private operators is unlikely to provide well-functioning solutions to service expansion. A further constraint is the time and resources required in the early stages of implementation, which may act as a disincentive for organisations considering trialling similar models.

An attractive feature of TPSB is that the responsibility for management, operation and maintenance is transferred to the community, who carry the majority of the operational risk. However, this feature also reduces the control of the operator over the quality of service delivery. In the TPSB model, the community leader has some discretion over charges, and there have been instances of overcharging.

Business model components[10]	Manila Water Company, Inc.	Water & Sanitation for the Urban Poor
Target customers	Nominal customer: the municipal authority	Nominal customer: the local service provider
	Primary focus on the unserved poor as customers	Primary focus on the unserved poor as customers
The value proposition offered to customers	High-quality operator of water and sanitation services for a large municipal authority with the capacity to extend services to citizens currently without connections	Integrated support to local service providers in designing and delivering water and sanitation solutions to poor consumers and mobilising funding/finance to support implementation
Key innovations	■ appropriate service levels to reduce costs ■ strong community involvement in option selection, design and operation ■ flexibility in the type of service provided based on community needs ■ multisector partnership approach in implementation (in the case of WSUP, both within the organisation and with external partners) ■ strong focus on operational sustainability	
		Flexible core WSUP model developed to be replicable in different locations
Commercial drivers	■ meet contractual service obligations ■ increase revenues ■ decrease in non-revenue water ■ social risk management	Not for profit, but strong income generation imperatives to secure resources for the functioning of WSUP and its project activities
Reducing cost of installation/ connection	Community meters and supply systems (cheaper than individual connections)	'Good enough' but sustainable service provision principles
How costs of additional connections are covered	■ Success of the TPSB programme justifies investment of company resources in expanding the programme. ■ In some instances capital support is provided by local government.	Infrastructure costs are generated by leveraging external donor funding/finance.
Implications for operation of the service	■ Requires a management system at the community level to oversee operation and bill collection. Risks and responsibilities for management and maintenance 'after the meter' are borne by the community management system. ■ Socialised water rates still applied in some instances to support affordability.	■ Dependent on selected option, but sustainable operation of the service is a fundamental consideration in option selection.

Table. Comparing business models

It is important to provide capacity building for the community, and to build transparency and accountability into management to enable end users to detect and prevent overcharging.

Are they replicable? WSUP is a flexible model, intended to be replicable in different contexts. Results from the WSUP projects currently rolling out in eight countries should provide useful insights in this area.

Many of the problems faced by MWCI in east Manila are common to urban areas across the developing world, and key elements of the TPSB programme could be replicated. The commercial benefits of the TPSB programme provide a sound business case for other private operators to experiment with similar models. But success will largely depend on whether the challenges identified above are addressed within the local context.

Both approaches demand a greater investment in project planning and design than a 'business as usual' approach, but benefits are realised in more effective and sustainable outcomes. Private firms in other sectors, including energy service provision, could learn from the methods used by these models in meeting the needs of unserved poor consumers within their areas of operation.

Private and public dynamism

Where appropriate regulatory frameworks are in place, governments are supportive, and clients are able to pay commercially viable rates, TPSB and WSUP stand as replicable, sustainable urban business models. By adopting a multisector approach that harnesses the dynamism and capabilities of the private sector and involves local communities, projects using these models could make a significant contribution to achieving the Millennium Development Goals.

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Notes

■ [1] UNESCO. 2003. Competing needs in an urban environment. In: *Water for People, Water for Life.* The United Nations World Water Development Report. UNESCO/Berghahn Books, Paris/Oxford. ■ [2] UNDESA. 2008. *World Urbanization Prospects: The 2007 Revision – Highlights.* UN, New York. ■ [3] Hammond *et al.* 2000. *The Next 4 Billion: Market size and business strategy at the base of the pyramid.* International Finance Corporation/World Resources Institute, Washington DC. ■ [4] Baclagon, M.L. 2004. *Pro-poor Water and Wastewater Management in Small Towns: Water for the poor communities (TPSB). Philippines.* UNESCAP, Bangkok; and Manila Water Company, Inc. 2007. *Sustainability Report 2007.* MWCI, Manila. ■ [5] For example, BBC World Service. 21 July 2000. Multinational company thwarted by local Bolivian community. See www.bbc.co.uk/worldservice/business/story_fdh210700.shtml. ■ [6] See www.wsup.com. ■ [7] Based on sources including: UN. 1992. *Agenda 21*. UN, New York. ■ [8] Lynch, M. and Toy. S. In press. *Sustainable Pro-poor Infrastructure: Integrating sustainability and poverty reduction objectives into project design and delivery.* ICE, London. ■ [9] Sen, A. 1999. *Development as Freedom.* Oxford University Press, Oxford. ■ [10] See www.businessmodelalchemist.com/2005/11/what-is-business-model.html.

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