

## **PRIVATE SECTOR INVOLVEMENT IN SLUM UPGRADING**

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### **I. Introduction and Background**

Living conditions in poor urban slums, characterized by a lack of basic public services and infrastructure, precarious housing, overcrowding and often escalating social problems, remain a major and growing challenge in cities all over the developing world. It is now estimated that one in three city dwellers, a billion people, a sixth of the world's population, live in slums.<sup>[1]</sup> Governments and the development community have invested significantly in improving the lives of slums dwellers through a range of upgrading programs which typically include infrastructure investments (water and sanitation, waste management, electricity, roads), and in some cases interventions aimed at improving tenure security, social infrastructure, housing quality, access to credit and access to social programs. The immense and growing scale of slums has, however, outpaced the impact these programs alone can have. When considering the scaling up of such efforts to address the growing problem, it is clear that the public sector cannot do it alone and there is much need for alternative approaches. One such approach with enormous potential is the mobilization of additional private sector finance and expertise.

Slums are the spontaneous response of the poor to their own needs for shelter in cities. They are essentially a private phenomenon, which responds to market incentives and distortions without extensive government interference. Slums form part of the informal economy, and they house many of the informal economy's actors. Slums thrive and grow because a significant amount of economic activity contributes to the provision of basic shelter, water, food, energy, and other goods to slum dwellers. Slum dwellers are often entrepreneurs themselves, but their demand also attracts other informal entrepreneurs. For example, so-called "illegal land developers" ignore zoning codes, minimum service requirements for residential subdivisions, (and in some cases even the property rights of the land holder) to sell small un-serviced plots on vacant land, often at the urban periphery, to the urban poor and new migrants. While not a legal business, the process by which these illegal subdivisions allocate land, as in many other types of slums, is entirely market-based with prices that respond to the level of land security, location, proximity to transport and employment, and the size and quality of the plot itself.<sup>[2]</sup> In slums that have not received assistance from NGOs or the government, the informal private sector has likely been the exclusive means for development, highlighting the market system on which slums rely, the basis for envisioning an expanded role for the formal private sector.

The formal private sector has played a role in slum creation as well as the role of injured party, defendant of property rights, or passive landlord. Private landowners may even be complicit with the "land invasions" and "informal land developers" that establish slums on their property because it opens the opportunity to charge rent to inhabitants while legally reserving the right to evict squatters when better opportunities for commercial development arise.<sup>[3]</sup>

In general, the formal private sector's attitude toward slums has ranged from indifferent to quietly supportive, primarily because slums house the informal economy which provides goods, services and labor at low costs.<sup>[4]</sup> The relationship between slum dwellers and business interests has, however, been strained and even contentious at times.<sup>[5]</sup> Slum creation accelerates with migration and can encroach upon land that is wanted for commercial development. The many negative externalities associated with slums, such as crime, disease, and poverty, can also spill out of the slums into the larger city, affecting businesses directly and the city's image.<sup>[6]</sup> The private sector's interests regarding slums are not clear cut or homogenous, thus understanding them within the local context is important to approaching and negotiating programs with the private sector.

This excerpt is from a more extensive paper on private sector involvement in slum upgrading. The two sections included here explore the challenges and opportunities for scaling up private participation in urban upgrading activities and the models through which this can happen. Other sections of the full paper also cover current approaches drawing on specific field examples and some of the more innovative solutions both the private sector and its partners have developed, as well as some of the issues and challenges that complicate the private sector's active involvement in slum upgrading within different contexts.<sup>[7]</sup> A final section looks at opportunities for working with the private sector in scaling up slum upgrading initiatives.

## **II. Challenges and opportunities facing the private sector in engaging with low income urban areas**

The wide array of relationships the private sector has had to slum upgrading and the many innovative mechanisms that have been piloted to encourage these can be described as a mélange of diverse responses to the many different contexts in which slums exist. There are a number of challenges and opportunities in working in low income areas which have been addressed in many different ways. Key issues include the environment for private sector activity, some of the main barriers facing the private sector, as well as the opportunities for both private sector and slums to benefit from engagement.

### ***Economic environment and the state of the private sector***

The state of the economy will have a tremendous impact on how the private sector can be mobilized for slum upgrading. A booming economy may attract private finance towards higher yield investments and away from lower yield investments in slums. It may also provide opportunities, however, to harness the demand for high-end real estate development to cross-subsidize affordable housing, as through TDRs.<sup>[8]</sup> To the extent that economic growth is effectively converted into greater tax revenue, it can also improve the chances that municipal governments' will be able to attract private finance for slum upgrading projects.

The economy will also influence the profile of slums and slum dwellers. The size, shape, and growth of slums depends not only on housing and land markets, but also on migration to cities, the informal sector, and unemployment rates, which are in turn shaped by economic growth. The levels of poverty within a slum are critical to the strategies employed to involve the private sector, and the economic state of the city will largely determine the opportunities for income available to slum dwellers.<sup>[9]</sup> This is by far the largest factor in spontaneous slum upgrading carried out by the residents themselves, and so it will certainly impact how interested slum dwellers are in cooperating with private sector for improvements.

The state of the private sector itself is also critical. In many countries the formal private sector is relatively small and may have limited capacity and even more limited resources, and is often highly risk averse making it easier to focus investment opportunities with the wealthy. The depth and capacity of the formal financial sector to mobilize capital is an even greater problem. While the informal sector is also a private source of slum upgrading activities, it may not bring to the slums the benefits of economies of scale, investment capital, long run corporate accountability, and integration of the slum into the greater city that are normally pursued with private sector partnerships. The formal private sector may be severely limited in its demand for investment opportunities and as such will not respond as enthusiastically as hoped to opportunities in slums.<sup>[10]</sup>

### ***Barriers to private sector engagement***

The private sector faces a number of barriers and disincentives to targeting the low-income market or engaging with efforts to upgrade slums. Often the choice not to pursue low-income clients or entry into slum markets is a very rational one considering the business, political, and economic structure and environment. Businesses are often ill-prepared to service the low-income market, and their lack of experience with poor clients makes them even more wary of exploring profit-making opportunities in the slums.

**Traditional Business Models.** The corporate culture in many developing countries does not foster collaboration with or service to the lower-income segment of the population.<sup>[11]</sup> The predominant business model tends to pursue low volume, high profit margin markets as the key to business success. Low volumes are believed to imply fewer administrative costs, but they must be accompanied with substantial profit margins. High profit margins are more acceptable to consumers at higher income levels. Corporations also often have trouble with pricing structures that stray from a basic unit-pricing scheme, making the transition to differential pricing, which can make servicing low-income clients profitable, more difficult. Internal corporate policies also can get in the way of servicing poor clients. The most common policy to impact slum dwellers is the collateral requirement for loans. Since most slum dwellers do not hold title to their land (and therefore cannot claim secure ownership of any improvements on that land, such as a house or workshop, either), they can present very little collateral and as such are not eligible for loans with formal sector lenders.

**Investment Climate.** Businesses also respond to national and local business environments, including the financial sector, business laws and regulations, transaction costs, and industry standards, that are often too conservative, costly and idealistic to meet the realities of poor consumers. Laws regarding business contracts, quality standards, labor benefits and wages, building codes, and bookkeeping regulations, among others, increase the cost of doing business in a country and restrict the range of products that can be offered. Poor people's effective demand is often for housing and services that are considered sub-standard by law, thus blocking the formal private sector from providing these products without a special waiver. This is particularly problematic with regard to building codes and the poor's preference for lower-risk, progressive construction of housing.<sup>[12]</sup> Companies that install infrastructure must present evidence that customers have the right to make changes to the land, which is normally enshrined only in a legal land title. Zoning laws can further restrict how land can be developed by legally barring companies from residential infrastructure installations despite the existence of a community of residential consumers and regardless of the legal title held on the land.<sup>[13]</sup>

In the financial sector, overly conservative reserve requirements restrict the supply of funds for lending, driving up interest rates, and banking laws often mirror corporate policies by requiring high levels of collateral for all lending.<sup>[14]</sup> Government regulation of utility prices can also discourage utility companies from investing in the more costly infrastructure required to service slum communities when there is no possibility of charging more to recover the higher costs. Particularly when investment is scarce, business-owners rationally choose to pursue the low-hanging fruit of wealthier markets where business regulations are less of a barrier.

Governments may also have the ability to unilaterally change the terms of contracts with businesses, such as for service provision or as part of public-private partnerships, which can lead to a reluctance of companies to bid on government contracts without substantial measures to mitigate political risk. Lastly, companies are acutely aware of the risk of social unrest in response to changes in service provision, such as the decline of subsidies, the transition from a flat fee to metering, and the removal of illegal service connections.<sup>[15]</sup> The government's support of companies in these transitions is critical to success and to maintaining the companies' image. Conversely, the government can act opportunistically and prefer the political benefits of siding with the people. While the political environment is more critical in private sector provision of public goods, the government's understanding and support of the private sector and market mechanisms will influence the general public's opinion of businesses and profit-making, and thus shape the relationships companies can build with people.<sup>[16]</sup>

**Public good investments.** One of the more fundamental economic problems facing the private sector in contributing to slum upgrading is the fact that many of the goods required by the poor are either purely public goods, or goods with strong positive externalities that create minimal private demand. Streets and pathways, public lighting, rainwater channels, public parks and public security are pure public goods that once supplied, cannot be denied to anyone in the neighborhood (nor to visitors for that matter). Potable water, sewerage, solid waste collection and disposal, electricity, healthcare and public education are goods that can be sold privately to varying degrees, however, denying them to people who are unwilling or unable to pay is not socially desirable because of the positive impact these goods have on the entire community. It is also, to varying degrees, difficult and costly to restrict these services, once installed, to only those who are paying. In both cases, the incentive to free-ride can be strong, making cost-recovery for the company uncertain. In fact, in some slums, the absence of a formal service provider leads slum-dwellers to make illegal connections to nearby electricity, cable television and water networks. Many companies may further interpret poor people's low income as increasing their propensity to free-ride, though

there is little evidence to support this suspicion, and private companies are often not willing to risk making an investment when they may not be able to collect payment for their services.<sup>[17]</sup>

Public goods are often considered the domain of the state, as this is the only institution that can effectively coerce payment for these goods through taxation. States, however, often do not have the capacity to provide all goods deemed to have positive social benefits, the starting point of this work. States do, however, create a political environment around these public and social goods that shape the private sector's willingness to get involved in providing them. States may claim that water, housing, health, and education, among other goods, are basic rights of all citizens, thus making them political issues. When the quantity, quality or price of any of these goods is not in-line with what society considers acceptable, politicians have the incentive to intervene in the market, in the best case, with subsidies and other incentives, and in the worst case (for business), with price controls.<sup>[18]</sup> In India and Brazil, for example, housing is considered a basic right of all citizens enshrined in the constitution, and politicians have consistently used the provision of free and highly-subsidized housing to win votes.<sup>[19]</sup> This raises poor people's hope of acquiring free government housing and can decrease their willingness to pay for housing provided through the private sector.

**Property rights and land titling.** There has been extensive study of the need for recognized and defensible property rights to attract private sector investment.<sup>[20]</sup> There is a body of literature that considers land titling in slums the most critical intervention that governments can do to spur private investment in slums. Certainly lack of permanent legal title is one of the defining elements of most slums, and it undeniably shapes private investment in housing and neighborhood upgrading, by both households and businesses.<sup>[21]</sup> The proportion of households with access to secure tenure is in fact the only indicator for the MDG related to improving the lives of people living in slums.<sup>[22]</sup> There is, however, a considerable gray area between holding a legal title and absolute precariousness, and there is also considerable debate about the true influence of land tenure on willingness to invest.

As most governments have come to recognize the existence of slums and accept them as marginal poor neighborhoods rather than illegal squatter settlements that need to be cleared, slum dwellers have gained differing and fluctuating levels of security of tenure.<sup>[23]</sup> This security may be informal, but it may be strengthened by pro-poor policies, land being public and without competing owners, historical longevity of the community, low demand for land development and correspondingly low land prices, or other factors that help guarantee that slum dwellers won't be evicted. Some governments also establish semi-formal lease or registration systems, whereby slum dwellers, particularly on public land, make renters' or settlers' arrangements with the government that give temporary legal right to occupy. Street addressing within slums has also been used to give a semblance of official location and recognition to individual homes in slums and normalize the slums as integrated neighborhoods.<sup>[24]</sup>

The importance of land titling and the extent to which it is a barrier to private sector involvement is a hotly contested issue. Some development professionals believe that it requires excessive time and effort that is only fruitful with significant political will, making it a distraction from the more direct issues of infrastructure and health that slum dwellers more desperately need. On the other side of the debate, the only long term, sustainable strategy is to ensure people have legal title to their land so that private investment can happen spontaneously. A common middle ground is that both land titling and slum upgrading can progress simultaneously, but that neither should be made to wait for the other.

**Culture.** A final barrier to private sector engagement with the poor is the lack of knowledge and understanding between the two groups. The culture gap between the formal private sector and the urban poor can be significant, making private businesses wary of attracting poor clients and poor people distrustful of private businesses' intentions. Many formal businesses do not see low income customers interested and able to pay for the services they provide. They may fear the crime they hear reported in the slums and believe that they would risk damage or loss of property. The formal business sector historically has had limited experience with poor clients, which impacts its ability to gauge risk, measure demand, and perceive the tastes and desires of the market. In some countries, class stereotypes limit formal business-owners from seeing poor people as a potential market altogether.<sup>[25]</sup> The misunderstanding and distrust can go both ways, as poor people may perceive formal businesses as exploitative, greedy, and unfair to both customers and workers alike.<sup>[26]</sup> This may mean that businesses have to invest in

building trust with their potential clients in poor neighborhoods before fully perceiving the benefits of entering these markets.

### ***Opportunities for private participation in slum upgrading***

Despite the considerable barriers mentioned above, there is a growing awareness of the potential for both slums and businesses to benefit greatly from the engagement of the private sector. The poor, who make up the bottom or base of the economic pyramid (BOP) with less than \$3000 in annual income (2002 PPP), total over 4 billion in numbers and over \$5 trillion in purchasing power. Hernando de Soto's theory of property rights also proposes that the poor have considerable "dead capital," \$1.2 trillion of it according to a 2003 study, in the form of untitled land (slum properties themselves) and unregistered businesses, that can be mobilized through titling and business registration. There is also increasing recognition of the considerable resources generated through remittances that are often channeled into housing and education. In 2005, \$167 million in remittances were officially recorded entering developing countries, and as much as 50% more may have been transferred informally.<sup>[27]</sup> If organized and leveraged correctly, the poor's purchasing power can represent a significant market capable of enticing the private sector into producing goods and services that improve living conditions in slums.

Much of the poor's purchasing power currently fuels the informal economy, and thus represents an un-captured market for the formal private sector. The informal economy produces an estimated average of 30% of official GDP in Asia, 40% in Eastern Europe, and 43% in both Africa and Latin America and the Caribbean making it a substantial proportion of the market.<sup>[28]</sup> While the informal economy represents an important complement to the formal economy in providing services to the poor, informality can bring with it higher costs of production related to smaller scale, lower quality goods, unsafe and unsanitary practices, exploitative pricing strategies, inconsistency, and other quality and price differentials that disadvantage the poor. This "poverty penalty," as it has been termed, hurts the poor and makes a clear case for encouraging the formal private sector to extend services to the poor. And the fact that the poor do regularly pay a price premium should convince the formal private sector that there is real demand and ability and willingness to pay.<sup>[29]</sup>

While spontaneous private sector initiatives that benefit the urban poor will continue to happen, there is still a need for public and donor funding and assistance. More importantly, the potential for donor funding to mobilize even greater amounts of private capital is an opportunity that must be recognized. Some programs to encourage investment by local capital markets and slum households themselves have mobilized upwards of 7 times the program budget in private investment.<sup>[30]</sup> The multiplier effect created by allowing poor people to contribute their own investment and offering a profit-making opportunity to private investors is a critical force for scaling up slum upgrading efforts.

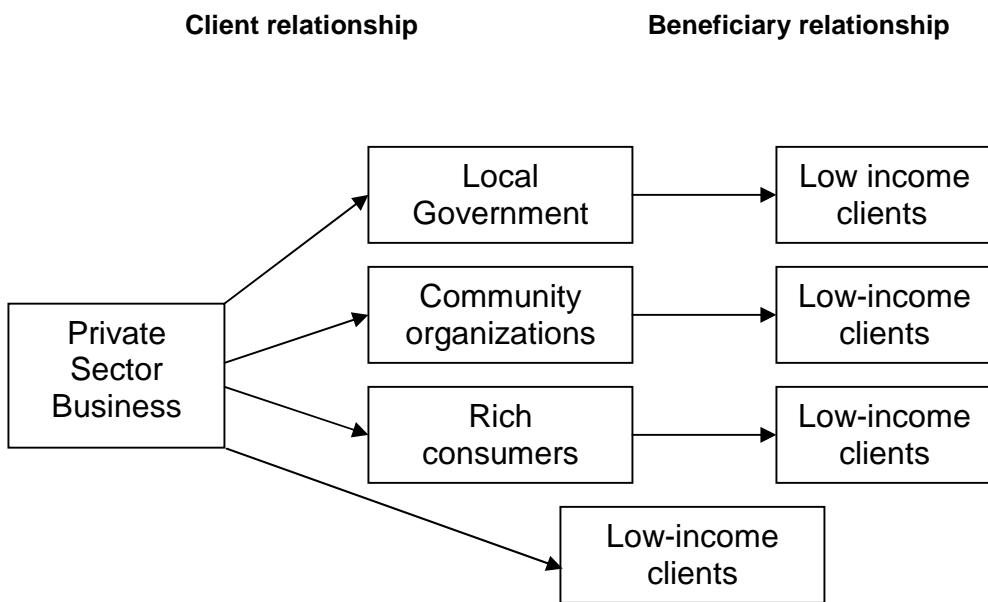
There is much to be gained not only from private sector finance and investment, but also from private sector expertise in efficient management of projects. The private sector has much greater experience in cost-minimization and the effective use of human resources, among many other strategies for efficiency. Formal private economic activity in slums also creates opportunities for wage labor and small local businesses to provide inputs, which lowers unemployment and support entrepreneurs. The presence and participation of the formal sector in slums can help to integrate communities into the broader economy of the city and reverse the marginalization of slum dwellers.<sup>[31]</sup>

### ***III. Current approaches to private sector participation in slum upgrading***

The private sector's role in slum upgrading can take many forms. An attempt to categorize these roles can be done along the lines of who the private sector engages as a client and how that leads to benefits for the poor. These client interactions are categorized as private sector engagement with: i) local government; ii) community organizations; iii) rich consumers, and; iv) directly with the poor. Naturally individual projects and ventures may contain multiple relationships and contracts linking the private sector to the poor, altogether creating a diversity of

options for mobilizing private investment. All of these mechanisms direct private investment towards the urban poor and the slum communities they live in, and can result in a wide range of impacts including increased and more efficient service provision, permanent infrastructure, innovative solutions to unique problems of poverty, greater choice for poor consumers, integration of slums into the formal sector and larger city, and social assistance to the poorest slum-dwellers

In the following section, examples of private sector's involvement in slum upgrading are presented according to the kind of business relationship the private sector engaged in, as a way to understand where new projects may involve private sector. The private sector must perceive a profitable transaction with all of its clients, and so understanding how those relationships and contracts have been developed to promote improved welfare for the poor is key to effectively identifying opportunities for private investments in slum upgrading. Beyond the four main categories of client interactions mentioned above, are further links, including patron-beneficiary relationships, political accountability relationships, regulatory relationships, and donor accountability relationships which connect each of these clients to poor people themselves, and can shape private sectors incentives, investments, service quality, and other business decisions. This multiplicity of potential connections creates a diverse universe of potential private-public-individual partnerships, a selection of which is presented below.



### ***Local government's mobilization of private finance***

Decentralization has increasingly empowered local government to act independently on matters of local development, including efforts to upgrade slums. Resource and capacity constraints, however, remain major challenges and create demand for finance and expertise in the operation and implementation of public works and services. While often bundled with public-private partnership projects that impact the city at large, there are a number of examples where such activities are also financing slum upgrading and service provision to poor areas. Donors such as USAID have created finance facilities, such as the Community Water and Sanitation Facility (CWSF), that provide gap funding and credit guarantees to help municipalities access commercial finance for slum infrastructure and service expansion projects.<sup>[32]</sup>

Interest has also been growing in municipal bonds as a means to mobilize private domestic capital for public projects. In India, the Ahmedabad Municipal Corporation issued the first municipal bond in 1998 without a central government guarantee for the purpose of financing a city-wide water and sanitation project that included many slum areas and the Slum Networking Project "Parivartan." In 2005, municipal governments around Bangalore built on Ahmedabad's success with a bond issue called the Greater Bangalore Water and Sanitation Pooled Facility that combined the commitments of 8 city governments. In both cases, the success of the bond sales depended on the municipal governments' having previously demonstrated a revenue surplus and received a sufficiently high credit-rating to ensure an interest rate in line with the government's projections of future ability to pay, among other conditions. The ability of municipal governments to mobilize domestic capital greatly enhances the scale at which municipal governments can engage in development. Ahmedabad's four municipal bond issues raised \$89.5 million between 1998 and 2006. The Greater Bangalore Facility raised over \$23 million with the assistance of a \$780,000 partial credit guarantee from USAID, essentially mobilizing over \$29 in domestic capital for every dollar donated.<sup>[33]</sup>

The private sector can also be brought into project implementation and service delivery through contracts and partnerships with local government. Municipal governments that lack the capacity to expand public services can pursue a range of public-private partnerships. Table 1 lays out the basic characteristics of the main types of public-private partnerships for infrastructure.

**Table 1: Types of Private-Public Partnerships**

Option	Asset ownership	Operations and maintenance	Capital investment	Commercial risk	Duration
<b>Service contract</b>	Public	Public and private	Public	Public	1-2 years
<b>Management contract</b>	Public	Private	Public	Public	3-5 years
<b>Lease</b>	Public	Private	Public	Shared	8-15 years
<b>Concession</b>	Public	Private	Private	Private	25-30 years
<b>BOT/ BOO*</b>	Private and public	Private	Private	Private	20-30 years
<b>Divesture</b>	Private or private and public	Private	Private	Private	Indefinite (may be limited by license)

\* Build-operate-transfer/ build-operate-own

Source: "Selecting an Option for Private Sector Participation," World Bank Toolkit, 1997.

The experience with public-private-partnerships in urban slums has mainly been through components of larger projects that may include an entire utility (water, sewerage, electricity, transport) within a certain city or region. Municipal governments may hire a private company to extend the water and sanitation network to new parts of the city including slum communities (a service contract), or they may include in a concession the commitment to extend service to certain slum communities, which obliges the private company to recover the costs of service provision and initial investment from their customers, including the slum dwellers. Pilot projects to extend service to poor communities in Jakarta as part of two separate water concessions have had some success, although moving beyond the pilot phase has been difficult. In Port Vila, Vanuatu, a concession contract successfully extended free potable water service to poor areas through cross subsidies from wealthier areas. In Manila, the concessionaires Mayniland Water Services and Manila Water Company use a variety of internal programs and partnerships with NGOs, community organizations and small entrepreneurs to increase water distribution to slums.<sup>[34]</sup> Municipalities have discovered that involving the private sector in public utilities and works is not without its problems, but as cities continue to consider public-private partnerships as ways to improve public services, service expansion to slums can be brought to the negotiating table and integrated into PPP contracts.<sup>[35]</sup>

Output-based aid (OBA) is a growing trend in structuring subsidies to the private sector so as to ensure that performance targets, particularly those related to service provision to the poor, are met. OBA links the payment of subsidies to the demonstration of specific service delivery or outputs, such as the connection of a set number of new customers to the electrical grid or water distribution network. Private providers must therefore shoulder their own risk of non-performance and provide their own finance upfront (in most cases) to meet the performance targets.<sup>[36]</sup> OBA has been particularly effective in extending water connections to slums through one-time network extension and connection fee subsidies, such as is being done in Manaus (Brazil), Jakarta, Manila, Mozambique, Surabaya (Indonesia), and Ethiopia.<sup>[37]</sup> As with concessions and other public-private partnerships and contracts, sufficient attention must be paid to mitigating payment risk on the part of the government and to designing efficient and credible monitoring and administration systems.<sup>[38]</sup>

### ***Communities as clients***

When slum dwellers are locally organized into community organizations or town councils, and particularly when they can ally themselves with local NGOs, there is an opportunity for their collective organization to attract the attention of the private sector and convince private business and investment of their collective potential as a client. Like local governments, local community based organizations (CBOs) and NGOs can organize and partner with the private sector to acquire goods and services that can then be enjoyed by all slum dwellers. The Community-Led Infrastructure Finance Facility (CLIFF) bases its model on the idea that local community organizations are capable of attracting private finance for their slum upgrading activities in the same way municipal governments can. The CLIFF provides grants for technical assistance, capital, knowledge-sharing, and management costs in addition to facilitating credit guarantees for local organizations that are soliciting private and public finance in order to scale up local solutions to the problems in slums. The Indian Alliance, a local NGO, has been able to get financing for housing projects for slum dwellers from domestic banks with only a 10% guarantee from CLIFF (down from an over 100% guarantee 10 years ago).<sup>[39]</sup> UN-Habitat has piloted a similar finance facility, the Slum Upgrading Facility (SUF), which looks to organize public, private and community stakeholders to encourage involvement of all sectors in enabling community organizations to carry out bankable slum upgrading projects.<sup>[40]</sup>

### Box 1: Getting Private Water Utilities into Slums: Metro Manila Water Concessions

Metro Manila's water authority was privatized in 1997 with the intention of solving problems of inefficiency and financial shortfalls. Two 25-year concession contracts were signed, one with Manila Water Company (composed of Ayala and International Water) to cover the eastern zone of the city and a second with Maynilad Water Services (Benpres and Ondeo) to cover the western zone. Both concessionaires are required to expand service coverage to 77-87% by 2001 and 95-98% by 2021. To achieve this, both companies have had to devise strategies to profitably extend water services to slums.

Although the concession agreement allows for the installation of one public standpipe per 475 people in depressed areas, both companies have worked to establish other types of connections that bring water closer to people's homes and ensure greater revenue for the companies. Manila Water has introduced group taps for 2-5 households to share a single connection registration and water bill. The company has also introduced community-managed water connections in which a community association is responsible for a master meter and installs and manages a distribution network to blocks or individuals. Manila Water also permits private companies to buy water for resale through private distribution networks, which the contractor must take responsibility for maintaining.

Maynilad has actively sought out partnerships with NGOs to extend individual household connections, preferred by customers in all income groups, to slums. Its Bayan Tubig (Water for the Community) program waives the land-title requirement in slums and integrates payment of the connection fee into the first 6, 12, or 24 monthly water bills. NGOs, such as the Swiss chapter of Médecins San Frontières and the local LINGAP Foundation in Malabon, get communities involved to support ownership of the program through information, education and community campaigns and assistance to the poorest families through microfinance. Maynilad additionally will contract with community-based associations to provide billing and collection services, which further localizes value creation in household water provision.

The companies have enhanced their image and have decreased non-revenue water through formalizing water provision arrangements in slums where many people had been receiving water through illegal connections and public standpipes. Through their contract with the local government and their partnerships with NGOs and community associations, these two private water utilities are promoting access to safe, reliable potable water in the poorest areas in Metro Manila.

From Almud Weitz and Richard Franceys eds., *Beyond Boundaries: Extending Services to the Urban Poor*, Asian Development Bank, August 2002, [http://www.adb.org/documents/books/beyond\\_boundaries/beyond\\_boundaries.pdf](http://www.adb.org/documents/books/beyond_boundaries/beyond_boundaries.pdf), pp. 56-60. See also, Richard Franceys and Almud Weitz, "Public-Private Community Partnerships in Infrastructure for the Poor," *Journal of International Development* 15, 2003, p. 1092-1094.

Communities can also organize to acquire other services from the private providers who may be unprepared to market their services to individual consumers in slum neighborhoods. In Port Vila, Vanuatu, a private company provides solid waste collection services to many areas of the city and recently began collecting from numerous centrally located points in the peri-urban village of Mele. The company began service in response to the village's collective request for a contract, and continues to deal with the village collectively through a health management committee that selects the pick-up sites, collects donations, and pays the company.<sup>[41]</sup> Community water boards are also a common way for poor neighborhoods to convince water utilities to provide service, as the community assumes the responsibility for collecting fees from users (often by applying flat fees per house, apartment, or business instead of metering charges which requires greater capital investment) and paying the monthly bill.<sup>[42]</sup>

In microfinance for housing, effective NGO microlenders can mobilize the credit histories of their member/borrowers in order to access commercial lines of credit and therefore expand their pool of funding. Genesis Empresarial, a Guatemalan NGO working in rural microenterprise and housing lending for the poor, is an example of an NGO that has gained access to credit lines from commercial banks, which they then extend to their clients on a cost-recovery and even profitable basis.<sup>[43]</sup>

Lastly, when pursuing title to their land, often the only viable option for poor slum-dwellers is to negotiate collectively, particularly when land must be purchased from and financed by the private sector. One such example is Terra Nova, a Brazilian for-profit company that regularizes land that has been illegally occupied by negotiating a fair price between the owners and residents, buying the land, making improvements on it, and then immediately reselling it to the residents at the collectively negotiated price. The organized collective bargaining keeps owners and the company in check from pricing the land above what the residents can pay. <sup>[44]</sup>

### ***Harnessing the private sector's pursuit of high-end markets***

Traditionally private businesses have focused on the higher-income market for the bulk of their profits because of the high profit margins this market permits and the higher perceived potential for growth. This profit-seeking tendency towards higher-income consumers can actually be harnessed to extend benefits to the poor through government regulatory instruments and even activism with higher-income consumers. The most common way private sector's focus on the high-end market is shaped to benefit the poor is through regulation of tariff structures to create cross-subsidization. This is often seen where water and sanitation utilities have been integrated with the private sector. Tariffs can be set by zones to benefit poor slums or by consumption levels, which set lower rates for a basic level of consumption (often termed a lifeline block) and then increasing rates for higher levels of consumption. <sup>[45]</sup> The type of price setting allows producers to lower the price for those who won't buy at higher prices, and therefore expand sales without losing the revenue from higher prices applied to those who are willing to pay more. The privatization of public utilities has its own difficulties, but integrating such cross-subsidization of service expansion to the urban poor in the contract conditions private companies' pursuit of the high-income market on its extension into the low-income market as well.

Innovative land-use management techniques have also used this approach to engage private developers in low-income housing and slum upgrading. In US cities, mixed housing development regulations have been used to oblige developers to produce and offer a certain number of units within each newly developed neighborhood at prices that are affordable to low-income households. In addition to producing housing for poor families, it also has the added benefit of avoiding exclusively low-income neighborhoods by integrating different levels of housing within one new development. <sup>[46]</sup> In the developing world, the creation of "Transferable Development Rights" (TDRs) has brought developers into the low-income market in much the same way. In Mumbai, developers were offered an increase in the permitted floor-surface-index (FSI) if they agreed to produce a given number of low-income units. In cases of slums, the government would require the developer to provide serviced housing *in situ* for all families in the slum, although the slum could and would be densified, but would allow the developer to take any remaining FSI and use it to develop market-rate apartments or commercial units on the same site, or transfer the FSI as TDRs to another location or sell them to another developer for use elsewhere in the city. <sup>[47]</sup> Developers responded not to the opportunity to upgrade slums or produce low-income housing, but to the opportunity to pursue more high-income development.

Even in cases where government was not involved, slum communities have come to similar arrangements with developers that owned the land where slums were situated but faced long court battles to evict slum dwellers. In an arrangement called "land-sharing," communities agree to voluntarily vacate part of the land for commercial development in return for receiving rights to occupy, and in some cases even housing and basic services, on the less commercially-viable part of the land. Examples include Thailand, the Philippines, Cambodia and India. <sup>[48]</sup>

While corporate social responsibility is not necessarily the private sector's most sustainable solution to the problems of urban poverty, it is worth mentioning that companies are increasingly recognizing the marketing power of philanthropy, particularly among higher-income consumers. Just as "green products" are taking over the high-end marketplace, socially responsible practices, such as fair wages and giving back to local communities, are increasingly publicized to attract greater brand loyalty from higher-income consumers. Activism directed at companies and their preferred consumers can bring awareness to the needs of the poorest people in slums, and contribute to greater corporate responsibility and philanthropy for housing, health and education services for the poorest of slum dwellers.

### ***Direct marketing to the poor***

While the urban poor undoubtedly struggle daily with limited resources, they do rely on the cash economy to purchase most of what they need to survive. The formal private sector often discounts the profitability of marketing to the poor, but the growth of the informal sector, which does target primarily the poor, is evidence of the buying power of slum dwellers. There are numerous examples of private sector innovation and market expansion directed towards what is increasingly referred to as the "bottom of the pyramid." Many of these are also examples of private sector engagement improving the quality of life in urban slums.

The private sector is particularly suited to housing markets, a principal private good in slums. Non-profit microfinance institutions are converting into for-profit lenders,<sup>[49]</sup> and private commercial banks are beginning to show interest in extending lines of credit to housing microfinance lenders.<sup>[50]</sup> Loans are made available for progressive housing construction, substitutes are made for collateral requirements including a shift away from mortgage finance in favor of other forms of guarantees such as group lending, and loans are bundled with savings and insurance services to help mitigate risks for both the bank and the poor household.<sup>[51]</sup>

Financial services are critical to the urban poor, who are more integrated into the cash economy than the rural poor and yet face many of the same barriers to accessing financial institutions. Carrying cash after payday or to make a large payment also puts people at risk of robbery.<sup>[52]</sup> In the Philippines, Smart Communications and Globe Telecom have created cell phone based financial services that allow users to pay for goods, transfer money and cross-border remittances, purchase airtime, pay utility bills and perform other financial transactions with the use of text-messages. Globe Telecom's systems do not even require the user to open a formal bank account, rather it allows transactions through partnered retail locations in addition to banks. The South African Bank of Athens has created a virtual bank called "Wizzit" that gives its customers a debit card and facilitates a number of transactions through secure mobile phone systems and existing worldwide ATM networks.<sup>[53]</sup>

Cemex, the leading Mexican cement producer, has gotten even more directly involved in housing construction by targeting its Patrimonio Hoy program to low and middle income families that are building their homes one room at a time. Cemex allows households to sign on to a 70 week program in which they make weekly payments in return for scheduled deliveries of cement at key intervals in the construction process. The price is locked in the day the household signs up, and technical assistance is available as part of the club fee charged to all program members. The credit provided for the purchase of cement, plus the technical assistance and storage that is provided to decrease loss of materials, have allowed families to add an additional room in 60% less time and with 35% less expense and of higher technical quality. Patrimonio Hoy has been an entirely commercial venture and gained a strong foothold in the lower to middle income construction market. Its success has led Cemex to extend it to the other countries where the company has operations.<sup>[54]</sup>

Health and hygiene are also areas that the private sector has introduced products to be marketed to the poor. The poor often buy in small quantities as they have little cash available and are hesitant to commit too much money to any single purchase when their incomes are unpredictable. Sachet packaging of soap, shampoo, and laundry detergent and single dose sales of common painkillers, fever and cold medications are giving poor people easy access to these products that were recently considered luxuries.<sup>[55]</sup> The lack of health facilities in slums has inspired the development of franchises of pharmacies that provide medical consults with physicians, blood pressure checks, and other health services along with medicines and health products, like condoms, clean syringes and insecticide-treated bednets, in and around slum neighborhoods. Franchisees get the benefit of brand recognition, and are obliged to undergo quality audits to ensure a consistent level of service. The poor have easier access to basic medical advice, and pharmacy doctors and nurses can help recognize when clients should seek further care. CFWshops in Kenya and Mi Farmacita Nacional in Mexico are both successful examples of this model.<sup>[56]</sup>

As discussed earlier, many of the most basic goods needed to make slums livable are public goods or goods with strong externalities that make individuals less likely to pay their full cost. The private sector does not have strong incentives to produce these goods because they cannot be sure that they will be able to recover their costs from consumers. New innovations in payment for services, however, are helping to alleviate these fears and mobilize private capital and business towards the slums. The Aquacard, a debit card used to turn on a water spigot, can be

used by residents to purchase water from a shared faucet without the markup of a local water vendor. The water provider receives payments immediately through agreement with the bank where the water debit accounts are held. Residents get the benefit of access to water and prepayment that eliminates any risk of future unexpected debt, and the water provider has 100% collection of user fees. The *Sulabh* Sanitation Movement provides bathroom and washhouse facilities in slums in India under a similar prepaid system whereby residents can purchase monthly family passes and visitors can pay-per-use.<sup>[57]</sup> As described in the section on communities as clients, collective responsibility for payment at the community level is also a way to relieve private sector providers of the burden of revenue collection and further induce them to enter markets.

The challenges of service provision to urban slums have inspired a wide range of small-scale solutions by private entrepreneurs whose business models are tailored to fit the unique structure of costs and demand found in particular slum communities. While formal private sector providers may have the advantages of scale and management experience, small-scale providers have the advantages of flexibility in product and process, and in-depth knowledge of specific local contexts. In water, small-scale providers include owners of water tankers, drillers of boreholes, and private vendors who distribute water from a standing tank, utility connection or a well through control of a standpipe or through a local distribution network that is privately installed.<sup>[58]</sup> Small-scale providers in communities without access to the electrical utility grid have used diesel generators to provide energy to locally built networks and even to charge 12-volt batteries for a fee.<sup>[59]</sup> Entrepreneurs have also provided sanitation services through the emptying of pit latrines, a process that was studied by UN-Habitat in 1996, leading to the introduction of Vacutug, an improved version of private providers' waste-container pushcarts that includes a diesel engine powered vacuum and a 500 liter tank.<sup>[60]</sup> While each individual venture is usually small, the total capital invested in slums by small-scale providers is not: in Manila, one small-scale water provider invested \$350,000 in five years to deliver water to 25,000 households; the small-scale providers in Ho Chi Minh City have invested \$80,000 in providing water to 400 household connections.<sup>[61]</sup>

Small-scale providers have developed a variety of solutions to the needs of slum dwellers for water, sanitation, electricity, telecommunications, and transport that are often second-best options yet optimal under the given circumstances. They can sometimes, however, be the first to introduce and test the pro-poor potential of technological advances, such as internet, computer and cellular technology.<sup>[62]</sup> Their knowledge of the market, flexibility to try out innovative technologies and business models, and existent capital investment in slums, make small-scale providers an important part of the private sector which has enormous potential in the provision of basic services.<sup>[63]</sup>

**Box 2: Small Water Providers and OBA Strategies: Aguateros in Paraguay**

Like most Latin American countries, Paraguay's potable water is provided principally by public water utilities—ESSAP in urban areas and SENASA in rural areas—however, a total of 17% of residential water connections are installed and serviced by approximately 400 independent small-scale water providers. These *Aguateros* provide potable water to close to 500,000 mostly poor residents of the peri-urban communities around Asunción and other cities through independent wells and distribution networks servicing 300 to 3,000 households each. *Aguateros* are capitalist entrepreneurs that invest their own funds or borrow from commercial banks to take advantage of the growth in peri-urban neighborhoods by setting up profitable water systems. They have adapted their revenue-raising techniques to match the payment abilities of their clients through market-rate financing of connection fees, and initial flat-fee monthly tariffs before later installing meters.

A working relationship between *Aguateros*, some though not all of whom operate informally, and the government has been negotiated over the 20 years since *Aguateros* began doing business. The public utilities have regulatory power over any water providers, and they review all *Aguateros*' bi-annual water quality certifications. They are also increasingly exerting control over tariffs and fees charged to users in response to some *Aguateros*' acting monopolistically and abusing users. The *Aguateros* have also organized an association to represent their interests, improve their own image and better negotiate with the government.

In 2002, working with the World Bank's Global Partnership on Output Based Aid, SENASA initiated a pilot OBA program to take advantage of *Aguateros*' and small construction companies' entrepreneurialism to provide potable water to four rural villages. Builder-operator consortiums bid for a contract that offered a per-connection subsidy contingent on completion of a borehole, disinfection system, elevated or pressurized ground storage tank, and distribution system with working household connections in each of four communities. SENASA negotiated the terms with local water users associations to ensure agreement on users' connection charges (beyond the subsidy) and tariffs. The response from the communities has been very positive, particularly due to the speed with which the projects were brought to completion, supporting the hope that partnerships between SENASA and *Aguateros* can continue to extend access to water to small towns and peri-urban communities.

The success that small-scale private water providers have had in formalizing their business and engaging with government regulatory agencies effectively deepened the private water sector, and this created the competitive conditions necessary for the success of output-based aid.

From "Aguateros: Small Scale Water Entrepreneurs," *Upgrading Urban Communities: A Resource Framework*, Section: Case Examples, The World Bank Group, <http://web.mit.edu/urbanupgrading/upgrading/case-examples/ce-py-agu.html> and Franz Drees-Gross et al., "Output-Based Aid in Water: Lessons in Implementation from a Pilot in Paraguay," *OBAApproaches Note Number 7*, May 2005, <http://www.gpoba.org/docs/OBAApproachesParaguaywater.pdf>.

***Private sector in promoting local economic activity***

Many of the strategies companies use to target the low-income market require bringing services closer to where people live and selling them in small quantities at higher volumes. These strategies require manpower within the slums, giving them an added benefit within slum communities – the creation of jobs and income generating opportunities. As companies expand to enter the low-income market, their labor forces must increase, but perhaps most important are the jobs and entrepreneurial opportunities that appear within the slums, and for which slum dwellers are best prepared. Patrimonio Hoy employs local promoters who receive commission for each new group of members that signs onto the program. Franchise pharmacies give slum dwellers with street-front property a lucrative business opportunity. Sulabh washhouses require full-time attendants. In slums where unemployment is truly high, these new sources of income for the poor cannot be overlooked as part of the benefit of private sector engagement.

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[1] United Nations Population Fund (UNFPA), *State of the World Population 2007: Unleashing the Potential of Urban Growth*, 2007, p. 16.

[2] See, United Nations Human Settlements Programme (UN-Habitat), *The Challenge of Slums: Global Report on Human Settlements 2003*, Sterling, VA: Earthscan, 2003, pp. 105-106 and Erhard Berner, "Learning from informal markets: Innovative approaches to land and housing provision," *Development in Practice* 11:2/3, May 2001, pp. 297-302, for a discussion of illegal sub-divisions and other mechanisms by which slum dwellers purchase or rent their plots.

[3] The case of urban slums in Tegucigalpa is one where ownership is contested between the local government and a number of wealthy landowners who have to varying extents extorted rent out of squatters and ultimately sought payment for the land after it had been developed ("100 millones de lempiras podría obtener Siri Zúñiga por negligencia de Alcaldía en pleito de tierras ejidales," Revistazo.com 6, Jan. 2003, <http://www.revistazo.com/ene-03/index.htm>). See also Erhard Berner, pp. 297-302, for a more general discussion of landowners' participation in slum creation.

[4] United Nations Human Settlements Programme (UN-Habitat), pp. 67-8.

[5] Harassment and eviction of slum dwellers by authorities can result from the pressure of business interests to open up land for development (Julia Viloria-Williams, *Urban Community Upgrading: Lessons from the Past – Prospects for the Future*, Washington, DC: World Bank Institute, 2006, pp. 2, 9-10).

[6] United Nations Human Settlements Programme (UN-Habitat), pp. 65, see p. 78 (footnote 74) for examples of slum dweller "relocation" for Olympics games.

[7] The full paper is forthcoming, 2008. For information, contact Judy Baker at [jbaker2@worldbank.org](mailto:jbaker2@worldbank.org)

[8] A building boom in the 1980s in Bangkok created the development pressure needed to make land sharing agreements appealing to owners of squatted land (Shlomo Angel and Somsook Boonyabancha, p. 110). Conversely, the fall in property values in Mumbai after 1997 adversely impacted the viability of the government's TDR scheme for slum upgrading (Vinit Mukhija, p. 801).

[9] See United Nations Human Settlements Programme (UN-Habitat), pp. 96-104 for an overview of economic and employment conditions of slum dwellers.

[10] See David S. Olinger, pp. 5-8, for a discussion of the range of characteristics of formal and informal private sectors.

[11] See discussion of the assumptions held by MNCs about the poor in C.K. Prahalad, *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits*, New Jersey: Wharton School Publishing, 2005, p. 8-9.

[12] John F. C. Turner, *Housing by People: Towards autonomy in building environments*, New York: Pantheon Books, 1977.

[13] *Housing: Enabling Markets to Work*, World Bank, Apr. 1993, pp. 24, 28-30.

[14] David L. Painter, "Scaling up Slum Improvement: Engaging Slum Dwellers and the Private Sector to Finance a Better Future," TGCI Development Innovation, June 2006, p. 16.

[15] See Tillmann Sachs and Robert LK Tiong, "The impact of political risks on public-private partnership (PPP) opportunities in Asia," 2005, <http://www2.ntu.edu.sg/ResearchPaper/ODR/2006/Impact%20of%20political%20risks%20on%20PPPs%20-%20CEE.pdf>.

[16] See C.K. Prahalad's discussion of the Indian government's relationship with the private sector, p. 6-7.

[17] Richard Franceys and Almud Weitz, "Public-Private Community Partnerships in Infrastructure for the Poor," *Journal of International Development* 15, 2003, p. 1084.

[18] Patricia Clarke Annez, "Urban Infrastructure Finance from Private Operators: What Have We Learned from Recent Experience?" World Bank Policy Research Working Paper 4045, Nov. 2006, pp. 10-12.

[19] For Brazil see Jessica Budds, Paulo Teixeira and SEHAB, "Ensuring the right to the city: pro-poor housing, urban development and tenure regularization in São Paulo, Brazil," *Environment and Urbanization* 17, 2005, p. 96. For India, see Sundar Burra, "Towards a pro-poor framework for slum upgrading in Mumbai, India," *Environment and Urbanization* 17, 2005, p. 72.

[20] See United Nations Human Settlements Programme (UN-Habitat), pp. 167-72.

[21] C.K. Prahalad connects the lack of land titles to the poor's preference for holding wealth in durable household items as opposed to immovable land and housing improvements. C.K. Prahalad, p. 12.

[22] "A complete listing of the goals, targets, and indicators for MDGs," World Bank, [http://devdata.worldbank.org/gmis/mdg/list\\_of\\_goals.htm](http://devdata.worldbank.org/gmis/mdg/list_of_goals.htm).

[23] For a full discussion of types of slum formation and tenure, see United Nations Human Settlements Programme, pp. 79-88.

[24] Catherine Farvacque-Vitkovic, Lucien Godin, Hugues Leroux, Florence Verdet, and Roberto Chavez, *Street Addressing and the Management of Cities, Directions in Development*, Washington, DC: World Bank, 2005, pp. 36-39.

[25] C.K. Prahalad, pp. 8-10, 20-1.

[26] Government and charitable organizations have often gone along with the “dominant logic [that]...the private sector [is]...exploitative of the poor” (C.K. Prahalad, pp. 6-7, 9).

[27] *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid*, World Resources Institute, 2007, p. 16.

[28] Attributed to Friedrich Schneider (2005); quoted from *The Next 4 Billion*, p. 16.

[29] C.K. Prahalad, p. 11-12.

[30] David L. Painter, p. 11.

[31] C.K. Prahalad describes the poor's integration into the formal market economy as providing opportunities for acquiring a formal identity, p. 107.

[32] “Community Water and Sanitation Facility: A Cities Alliance Initiative,” Factsheet from the Fourth World Water Forum, Mexico City, March 2006.

[33] David L. Painter, pp. 19-20.

[34] See Almud Weitz and Richard Franceys eds., *Beyond Boundaries: Extending Services to the Urban Poor*, Asian Development Bank, August 2002, [http://www.adb.org/documents/books/beyond\\_boundaries/beyond\\_boundaries.pdf](http://www.adb.org/documents/books/beyond_boundaries/beyond_boundaries.pdf), pp. 50-61 for further description of these public-private partnerships, and the full publication for a broader selection of examples.

[35] See Almud Weitz and Richard Franceys eds., *Beyond Boundaries: Extending Services to the Urban Poor* for examples of problems with pro-poor concessions. See Meera Mehta, “Balancing Commercial Viability with the Needs of the Poor in the Development of Urban Water Supply and Sewerage Projects,” *Project Notes* 14, USAID Indo-US Financial Institutions Reform and Expansion Project – Debt Market Component FIRE(D), January 1999, <http://www.niua.org/indiaurbaninfo/fire-D/ProjectNo.14.pdf>, for issues related to integrating service provision to the poor into commercially viable projects.

[36] “Output-based aid: Supporting infrastructure delivery through explicit and performance-based subsidies,” *OBApproaches* Note Number 5, March 2005, [http://www.gpoba.org/documents/OBApproaches\\_What\\_is\\_OBA.pdf](http://www.gpoba.org/documents/OBApproaches_What_is_OBA.pdf), and the GPOBA website: [www.gpoba.org](http://www.gpoba.org).

[37] GPOBA Activities (updated Feb. 22, 2008), <http://www.gpoba.org/activities/index.asp>.

[38] “Output-based aid:....”

[39] Ian Morris, Financial Services Coordinator, Homeless International, telephone interview, March 28, 2008.

[40] Ruth McLeod, “SUF Local Finance Facilities: what they are, why they are important, and how they work,” UN-Habitat Slum Upgrading Facility (SUF) Working Paper 8, April 2008.

[41] Almud Weitz and Richard Franceys eds., *Beyond Boundaries*, pp. 42-43.

[42] Juntas Administradoras de Agua (administrative water boards) are the most common mechanism for charging for water and maintaining distribution systems that provide through household connections in poor slums and rural villages in Honduras (Author's experience). Water boards are also used in poor slums in Manila (Richard Franceys and Almud Weitz, “Public-Private Community Partnerships...,” p. 1093).

[43] Ivo Imparato and Jeff Ruster, *Slum Upgrading and Participation: Lessons from Latin America*, Washington, DC: World Bank, 2003, p. 284.

[44] See “FIABCI Premia Cohapar e Terra Nova, Do Parana,” *FIABCI Brasil Informa*, Apr. 19, 2005, [www.fiabcibrasil.com.br/Noticias.asp?CodNoticia=582](http://www.fiabcibrasil.com.br/Noticias.asp?CodNoticia=582), and [www.grupoterranova.com.br](http://www.grupoterranova.com.br).

[45] “Establishing Pricing Policy,” *Water and Sanitation for All: A Practitioners Companion*, <http://web.mit.edu/urbanupgrading/waterandsanitation/funding/estab-price-policy.html>.

[46] For a complete discussion of mixed-income housing in the US see Alastair Smith, “Mixed Income Housing Developments: Promise and Reality,” NeighborWorks Program, Joint Center for Housing Studies of Harvard University, Neighborhood Reinvestment Corporation, October 2002, [http://www.jchs.harvard.edu/publications/W02-10\\_Smith.pdf](http://www.jchs.harvard.edu/publications/W02-10_Smith.pdf).

[47] Vinit Mukhija, “Enabling Slum Redevelopment in Mumbai: Policy Paradox in Practice,” *Housing Studies* 16:6, 2001, pp.791-806.

[48] Shlomo Angel and Somsook Boonyabancha, “Land Sharing as an Alternative to Eviction: The Bangkok Experience,” *Third World Policy Review* 10:2, 1988, pp. 107-127.

[49] Many microfinance institutions have entered the field of housing microfinance: “Cases in point include Banco Sol in Bolivia, Banco Solidario in Ecuador, Mibanco in Peru, Banco Ademi in Dominican Republic, Calpia in Honduras and Genesis Empresarial in Guatemala.” (Bruce Ferguson, “Housing microfinance – a key to improving habitat and the sustainability of microfinance institutions,” *Small Enterprise Development* 14:1, March 2003, pp. 26-7)

[50] PROA, an NGO working with Aymara and Quechua populations in El Alto Barrio, receives funding for its shelter lending program from Mutual La Paz, a traditional mortgage lender. Loans are for home improvement, water and sewer line connections, titling, and new constructions built by small contractors (David S. Olinger, “The Role of the Private Sector in Delivering Low Income Housing in Developed and Developing Countries,” International Housing Coalition, paper prepared for the World Urban Forum III, Vancouver, Canada, June 2006, pp. 23-24). Genesis Empresarial has also received a commercial line of credit from local commercial banks for housing microfinance (Ivo Imparato and Jeff Ruster, p. 284 and [www.genesisempresarial.com](http://www.genesisempresarial.com)).

[51] David L. Painter, pp. 11-18.

[52] *The Next 4 Billion*, p. 97.

[53] *The Next 4 Billion*, pp. 102, 104.

[54] See "Combining Profit and Social Development," *Global Envision*, May 27, 2003, [www.globalenvision.org/library/5/484](http://www.globalenvision.org/library/5/484) [accessed Feb. 15, 2008], or Ricardo Sandoval, "Block by Block," *Stanford Social Innovation Review*, Summer 2005.

[55] C.K. Prahalad, pp. 16-18.

[56] *The Next 4 Billion*, p. 35, 39-40.

[57] Almud Weitz and Richard Franceys eds., *Beyond Boundaries*, pp. 40-41.

[58] In Cebu, small-scale providers manage small household distribution networks from their own private wells in areas not reached by the public utility. In Delhi, tricycle services can be hired to transport water from a public standpipe to the home. In Dhaka, 9,100 households are provided minimal water through an illegal distribution network that draws water without charge from the public utility network. In Ho Chi Minh City, almost 20% of residents get their water from small providers who resell water from their private connection, operate water tankers, manage small pipe networks, sell bottled water, or in one case, provide well water through a partnership with the public water utility. (Arthur C. McIntosh, *Asian Water Supplies – Reaching the Poor*, Asian Development Bank, London: IWA Publishing, 2003, [http://www.adb.org/Documents/Books/Asian\\_Water\\_Supplies/asian\\_water\\_supplies.pdf](http://www.adb.org/Documents/Books/Asian_Water_Supplies/asian_water_supplies.pdf))

[59] Yemen has achieved high levels of rural electrification through private networks powered by diesel generators. In parts of Africa, 12-volt batteries are a popular energy source and private generator owners charge to re-charge batteries. (David Ehrhardt, "Impact of Market Structure on Service Options for the Poor," for the conference Infrastructure for Development: Private Solutions and the Poor, May 31 – June 1, 2000, London, UK, [http://www.castalia.fr/SITE\\_Default/x-files/1863.pdf](http://www.castalia.fr/SITE_Default/x-files/1863.pdf))

[60] Graham Alabaster and Iole Issaias, "Removing human waste – the Vacutug solution," *Habitat Debate: Water and Sanitation for Cities* 9:3, September 2003, p. 17.

[61] Herve Conan, "Scope and scale of Small Scale Independent Private Water Providers in 8 Asian Cities," <http://www.adb.org/Documents/Events/2003/3WWF/conan.pdf>, p. 5.

[62] Private internet cafes and village telephone operators are often the first to connect residents to information technology, and their services by necessity often include training and promotion of the various uses of these technologies in order to attract and keep their clients. Small-scale providers and poor consumers alike are generally "more willing to adopt new technologies because they have nothing to forget." (C.K. Prahalad, p. 16)

[63] For a discussion of how to engage small-scale providers, see Marianne Kjellen and Gordon McGranahan, "Informal Water Vendors and the Urban Poor," IIED Human Settlements Discussion Paper Series, March 2006, <http://www.iied.org/pubs/pdfs/10529IIED.pdf>, pp. 19-23.

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