

## Using Output-Based Aid in Urban Projects

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Photo courtesy of GPOBA

**A**gainst the backdrop of rapidly rising urbanization in the developing world and the growing demand for basic services such as water and power, there is an increasing need to improve service delivery, particularly in low-income urban settlements. Output-based aid (OBA) approaches, with their pro-poor targeting, have been piloted in cities around the world. This note discusses the benefits and challenges of using an OBA approach in urban projects for low-income residents, provides examples of successful innovations, and highlights features that will improve the likelihood of success.

By 2020, half the population of the developing world is likely to live in cities; by mid-century, the number of urban dwellers in developing countries may reach 5.2 billion (United Nations, 2011). With a rapid migration from rural to urban areas, many governments have not been

able to keep up with the demand for urban infrastructure and social services such as electricity, water and sanitation, transport, solid waste management, education, and health care. The people most affected by the lack of access to basic services in urban areas are the poor. Often they obtain essential services, like drinking water or electricity, from informal vendors at substandard quality and at a high premium. Without access to reliable electricity, poor urban households lose valuable hours of productivity, or compromise on safety with illegal electricity connections. Given the growing demand for basic services, there is an increasing need to improve service delivery in low-income urban settlements.

One way to help the urban poor gain access to basic services is output-based aid (OBA), a results-based

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financing (RBF) mechanism. OBA links the payment of public funds or subsidies to the achievement of specified outputs and actual service performance, as opposed to traditional inputs. Output definitions are designed to be as close to the desired development outcomes as is practicable, and within the scope of the service provider to deliver. Most urban OBA projects also require that a portion of the subsidy payment be withheld until sustainable service delivery has been demonstrated. Satisfactory service delivery is assessed by an Independent Verification Agent (IVA) through beneficiary household surveys, and by checking the quality of the installation of the connection, the quality of service, and billing records (see OBA Approaches Note Number 43).

## Targeting the urban poor

A core component of an OBA scheme design is explicit targeting of low-income households. For the urban poor, a major hurdle to obtaining basic services is the high initial cost of access, such as a connection fee for water supply. OBA can help reduce this barrier by paying a subsidy to bridge the gap between the actual cost of access and what users are willing and able to pay.

Geographic targeting can be effective in cities where poor households tend to be concentrated in slums and informal communities. Where communities are more diverse economically, some OBA schemes use alternative targeting strategies, such as subsidizing only those services that the non-poor are less likely to use. In Maputo, Mozambique, for example, an OBA scheme subsidized only yard taps, each typically shared by three households, as opposed to more expensive individual household connections.

Other OBA schemes target beneficiaries based on their income, or poverty level. In the Indonesian city of Surabaya, the government utility plans to use an OBA approach to deliver about 15,000 individual household water supply connections through the piped network. The project initially utilizes geographic targeting, but refines the targeting using household characteristics as a proxy to determine poverty levels. Only households with a very low electricity supply capacity (less than 1,300 VA) or no formal electricity connection at all will be eligible under the scheme.

Similarly, an OBA scheme to connect poor households to the electricity grid in the Liberian capital of Monrovia uses a combination of targeting mechanisms. Since Liberia has one of the lowest electrification rates in the world, less than 1%, even relatively better-off urban dwellers in poor areas might not have access to electricity. While 21 low-income areas are targeted, connections will only be provided to households living in one-story dwellings with sub-standard structures.

## Risk transfer and access to finance

In OBA schemes, payment on delivery of specific outputs shifts performance risk to the service provider. Service providers can be public, private or nongovernmental organizations (NGOs). Since service providers are not paid the subsidy in full until they deliver outputs, they must have access to sufficient finance for the initial investments. The financing of this initial investment is a significant risk for service providers, and is one of the biggest constraints to developing output- or results-based projects. This constraint has proved particularly challenging when working with NGOs and small-scale service providers, but can also provide the opportunity to partner with other approaches.

Partnering with other urban initiatives opens new financing opportunities. For example, linking OBA with the Cities Alliance<sup>1</sup> Country Programmes opens the opportunity to engage with larger planning processes and to work closely with both national and local governments as well as with slum dwellers organizations. In Ghana the World Bank, GPOBA and Cities Alliance are cooperating on the emerging Greater Accra environmental sanitation strategy, with a potential mix of funds from sources such as community savings and World Bank loans, to improve service access.

In cases where the service provider cannot afford to finance the whole project in advance, phased subsidy payments against intermediate outputs have been used. On rare occasions, small advance payments have been required by service providers for expenses like start-up costs and awareness campaigns. In Armenia, for example, where winters are long and severe, low-income households expend a large share of their budgets on heating costs using traditional fuels because they could not afford the connection fee to access cleaner and cheaper gas heating. In the Armenia Heating and Gas OBA project, service providers received 20 percent of the subsidy in advance, then 70 percent once the household was connected to gas heating, and a final payment of 10 percent after they had demonstrated adequate service provision. The private operators provided 5,847 poor households (about 23,738 people) in urban apartments with gas-based heating services. These households represented a large proportion of those targeted, those meeting the eligibility threshold score of 34 under the national social protection program (the Poverty Family Benefit Program). More typically, service providers have met pre-financing needs from internal cash flows or externally sourced funds, or both.

## Services demand risk

Demand (or up-take) risk occurs where the service provider has miscalculated or over-estimated consumer demand for the service.



Progress in the Mumbai Improved Electricity Access for Indian Slum Dwellers OBA project has been slow, in part due to weak up-take from potential beneficiaries. Emerging findings from a baseline study of the project (Mimmi, 2012) highlight the importance of undertaking a robust willingness-to-pay (WTP) study among target beneficiaries early on in OBA project preparation. Results from the study indicate that slum dwellers pay significantly less for illegal connections (access fee, internal wiring, and tariffs) than for legal connections. Although there are service quality and safety concerns around such connections, the lower cost has undermined the demand for formal OBA based connections. The study noted the importance of early engagement with local community leaders to help manage political economy issues in the targeted slum communities.

Two successful OBA projects in the water sector mitigated this demand or up-take risk in different ways, based on the service providers experience on working in low income communities. In the Manila Water project the service provider waited for a minimum number of formal connection applications before starting network investments. In the Jakarta Water project a target connection rate of 46.5 percent was agreed with the service provider based on willingness-to-connect assessments from community surveys. If this target was met then all pre-agreed tertiary network extension costs would be fully reimbursed. Failure to meet the target, however, would result in partial reimbursement of such costs on a pro rata basis, thus incentivizing the service provider to maximize the speed and rate of connection.

## Designing OBA projects for the urban poor

Service provision in informal or slum settings presents some unique challenges. A major obstacle is the often precarious tenure status of slum dwellers; many are ineligible for formal household connections by law. Residents also have no guarantee that their dwellings will be safe from demolition. Service providers may lack legal or regulatory authority to serve these informal areas. They are also likely to lack incentives to serve such areas for fear of low uptake or because they see it as a high risk investment.

To overcome such challenges, in a scheme in Kampala, Uganda, the National Water & Sewerage Corporation (NWSC) targeted communities where the chance of reclamation by developers or eviction was low. It was also proposed that new developers should compensate residents when they clear an area, even if the settlement is illegal. NWSC also realized that yard tap connections were impractical and too expensive in many of the densely populated informal settlements. Thus NWSC decided to

increase the provision of public water points and introduce pre-paid meters.

A slum electrification OBA project in Kenya tackled the issue of illegal connections, which were leading to losses for the Kenya Power & Lighting Company (KPLC), posing a public safety risk, and encouraging extortion and gang behavior. The OBA scheme introduced design innovations to improve sustainability and decrease the threat of theft and tampering, including: switching to concrete poles, which cannot be climbed as easily; using a medium voltage line that is difficult to access illegally as the main feeder line across the communities, and using small transformers on each pole to step down the voltage to distribution levels for a small number of households; using split pre-paid meters so most of the equipment is on the pole instead of in the household; and limiting the need for house wiring through the use of ready-boards. KPLC will also pilot a program in electricity credit sales by mobile phone so that residents do not need to leave their houses to top up their accounts.

In addition, experience has shown that for OBA schemes to succeed, they must have buy-in and commitment from local governments. In the Armenia Heating and Gas OBA project, for example, it was noted that early and active involvement with local authorities would be critical for any future scale-up since they can efficiently promote awareness among the urban poor about the benefits of the OBA approach. The government agency should have the administrative capacity to manage OBA contracts and subsidies.

## Lessons learned and prospects for scaling-up or replication

Although OBA is not the solution for all urban service problems, it is a tool that decision-makers can consider to help increase the access of urban poor households to basic services, in particular where the cost of service access is unaffordable, and where service access needs to be built into urban project design. To succeed, however, project design should be tailored to the specific characteristics of urban households and their physical and social environment. Land tenure issues must be addressed early on in the design stage. Active outreach and engagement with community-based organizations, and political and community leaders, has also proved key for successful project design and implementation.

Incorporating OBA schemes, with their pro-poor targeting mechanisms, into broader urban reform and slum upgrading programs can also be effective. OBA approaches and mechanisms can bring multiple stakeholders together, acting as a resource convener, and potentially play an important role in shaping the policy framework for urban development in terms of service provision and service access for the urban poor.

## References

- Assessing the demand for improved electricity in urban slums: findings from a baseline household survey in Mumbai (Draft). L M Mimmi, 2012.
- GPOBA Working Paper Number 11: Access to Finance in Output-Based Aid. 2010.
- OBAApproaches Note Number 23: Output Based Aid in Armenia – Connecting Poor Urban households to Gas Service. 2009.
- OBAApproaches Note Number 28: Output Based Aid in the Philippines – Improved Access to Water Services for Poor Households in Metro Manila. 2009.
- OBAApproaches Note Number 31: Connecting Colombia's Poor to Natural Gas Services – Lessons Learned from a Completed Output-Based Aid Project. 2010.
- OBAApproaches Note Number 38: Output Based Aid in Indonesia – Improved Access to Water Services for Poor Households in Western Jakarta. 2010.
- OBAApproaches Note Number 43: Independent Verification in Results-Based Financing. 2012.
- World Urbanization Prospects, the 2011 Revision. United Nations: Office of Economic and Social Affairs.

## Web-based sources

- See <http://oba-data.org>:  
Access to Gas & Heat Supply for Poor Urban Households (Armenia).  
OBA in Kampala – Water Connections for the Poor. Kenya Electricity Expansion Project.  
Manila Water Supply.  
GPOBA W3 – Expanding Piped Water Supply to Surabaya's Urban Poor.  
Yemen Water for Urban Centers.

<sup>1</sup> The Cities Alliance is a global partnership for urban poverty reduction and the promotion of the role of cities in sustainable development. The Cities Alliance was created in 1999 when 10 donor governments joined the World Bank, UN-HABITAT and the major international associations of local authorities to form a new partnership aimed at focusing on two key issues: the growth of slums and the management of cities where slum growth was taking place.

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