

Output-Based Aid in Water and Sanitation

The Experience So Far

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Output-Based Aid (OBA) has been used since the early 2000s to deliver basic infrastructure and social services to the poor, typically through public-private partnerships. Given the limited experience with OBA in the water and sanitation sector, GPOBA has made a concerted effort to test OBA approaches in the sector. A growing number of regional and local private providers have emerged, and some projects involve public providers. This note is based on the World Bank study “Output-Based Aid: Lessons Learned and Best Practices” (Mumssen, Johannes and Kumar 2010) and aims to share experiences so far with the use of OBA in water and sanitation.

Output-Based Aid (OBA) is a results-based financing mechanism that ties the disbursement of public funding (mostly in the form of subsidies) to the achievement of clearly specified services or outputs. In water and sanitation, there are currently 22 OBA projects with World Bank Group participation: 15 water supply schemes, three sanitation schemes, and four providing both water and sanitation.¹ Most of these projects involve one-time subsidies for access to service. And most involve piped-water schemes, with access usually defined as the delivery of working connections. About half the projects are in Sub-Saharan Africa (figure 1), in part because of concerted efforts by the Global Partnership on Output-Based Aid (GPOBA) to pilot projects in this region.

Funding

Of the 22 projects identified, seven include OBA subsidies funded by the World Bank, for a total of US\$82 million. This includes both concessional funding from the International Development Association (IDA) and non-concessional funding from the International Bank for Reconstruction and Development (IBRD). The other 15 projects include GPOBA subsidy funding, for a total of US\$54.9 million. Typically, subsidy levels make up about 65% of total costs. Some of the GPOBA-funded schemes are part of a larger IDA or IBRD initiative, for example



Photo by Jonathan Davidar

the Senegal On-Site Sanitation projects which are funded by IDA and GPOBA.

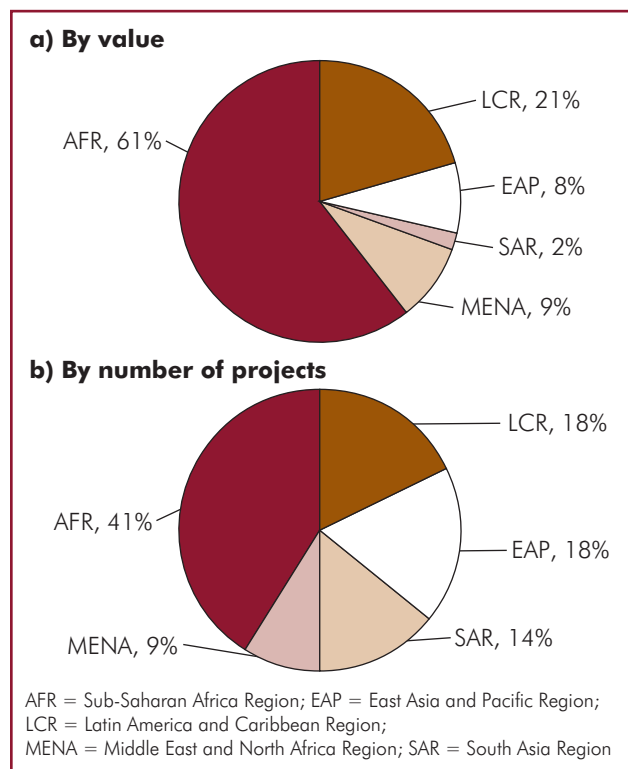
Co-financing comes mostly from beneficiary contributions and on average is about 15% of the total costs. In some cases it is provided by the government or the private sector and in a few cases by the public sector utility, as in the case of the National Water and Sewerage Corporation in Uganda. Another example of co-financing arrangements is a scheme in Honduras that set up an OBA facility targeted to small and medium-size projects, including new (greenfield) and extension (brownfield) projects in peri-urban and rural areas. Funding sources include a central government contribution of US\$1 million to provide access to finance—“bridge financing”—for projects being implemented by public operators with limited access to commercial credit; and a GPOBA grant of US\$4 million (Mandri-Perrott, Schiffler, and Aguilera 2009).

Targeting

Almost all the water projects identified use geographic targeting as the primary screening mechanism. These projects are usually small scale and located in areas

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Figure 1. Regional distribution of World Bank Group OBA projects in Water and Sanitation



where the poorest are concentrated and the risk of including non-poor beneficiaries is low. Some service providers have developed additional mechanisms:

- The Manila Water Supply Project, Philippines, combines geographic and means-tested targeting. It targets communities officially certified as “indigent”—those where per capita income is less than \$1 a day (Menzies and Suardi 2009).
- In Andhra Pradesh, India, a project to improve rural water supply combines geographic, means-tested and self-selection targeting. To target beneficiaries in the 25 villages covered, the project used the government’s “white ration card” system, which entitles low-income individuals to obtain basic commodities at a reduced price (Mandri-Perrott 2008).

Performance risk

Under an OBA scheme the service provider bears the performance risk—this means that service providers pre-finance the outputs before being reimbursed by the OBA subsidy upon independent verification that pre-agreed outputs have been delivered. In the water sector these outputs are generally working connections, often demonstrated through billing or collections records. In most projects funded by GPOBA,

part of the output-based payment is withheld until after several months of service delivery, to enhance the sustainability of the scheme.

- In the Vietnam Rural Water Project 80 percent of the GPOBA subsidy is disbursed to the international nongovernmental organization (NGO) implementing the project, the East Meets West Foundation, once the connection is verified and the other 20 percent after six months of satisfactory service delivery.
- In the Kenya Microfinance for Community Water Schemes Project, the community water associations involved are paid only after verification of working connections, several months of service delivery, and, in some cases, demonstration of increased sales (Virjee 2010).

In the water sector, where service providers tend to be small local operators, NGOs, and community organizations, poor access to finance can limit their ability to pre-finance outputs. That limits the performance risk that can be shifted to providers, as shown by an example from Uganda (box 1).

Beyond shifting performance risk, a robust contractual framework for OBA water schemes can help ensure quality service provision and provide appropriate checks and balances should problems arise.

Monitoring and verification

“Outputs” in the water sector mainly include functioning household, yard tap or kiosk connections to the network. In theory, the monitoring of outputs in the water sector is not dissimilar to other sectors. But in practice, because the majority of water OBA schemes identified are funded by GPOBA, and GPOBA tends to fund the hiring of independent verification agents, most water projects identified involve independent verification engineers.

If monitoring is to generate lessons for scaling up water schemes, government entities should also be involved. In the Uganda small towns project, the independent verification agent reports to the Directorate for Water Development of the Ministry of Water and Environment. In some cases, because of capacity issues, development partners may play a larger role in the monitoring and verification process for projects involving small local providers.

Emerging lessons

Although the OBA approach is still at the pilot stage in the water sector, important lessons are already emerging.

Box 1. Phasing in payments in Uganda's water sector

The GPOBA-funded Water Supply in Uganda's Small Towns Project, involving small local private operators, uses two different methods of disbursing output-based payments. In small towns, requiring mainly extensions from the existing system, it uses a relatively "pure" form of OBA: private operators are paid after connections and water service delivery are verified. But in rural growth centers, requiring new systems, output-based payments are phased, with 60 percent disbursed during construction and 40 percent after connections and service delivery are verified.

This phased method was chosen because limited access to affordable finance to cover costs until outputs are delivered, and the newness of the OBA approach, were expected to result either in very high bids that the poor could not afford (a share of the costs is included in the tariff) or in no bids at all. Later, depending on the results of the pilot, the disbursement method in the rural growth centers may move closer to a more 'pure' form of OBA.

Subsidies should be aligned with incentives. OBA schemes piloted in the water sector provide a clear, discrete, one-time subsidy for access. But the sustainability of such schemes depends largely on the relationship between the subsidy provided and the tariff charged to customers for ongoing service provision. Tariffs should be affordable for the poor and cover all reasonable and efficient operating costs.

Where tariffs are lower than operating costs, connecting new customers will result in losses for service providers. As a result, they will have insufficient funds to maintain the system—and no incentive to serve customers at those tariffs. Thus efforts to scale up and mainstream OBA in the water sector need to go hand in hand with tariff reform. OBA schemes such as the Kenya and Uganda water projects have brought these issues to the forefront (Azuba, Mugabi, and Mumssen 2010; Virjee 2010).

Private capital leveraging depends on tariff reform. OBA does leverage private funding, but the amount leveraged will be limited by the extent to which tariffs can incorporate investment costs while remaining affordable. Ultimately, the service provider must be able to recoup its investment through the tariff. If the aim is to have a smaller amount of subsidy with more of the investment recouped through private financing, the tariff needs to be able to absorb these costs.

Where private sector experience is bringing efficiency gains and market discipline to the water sector (as in Uganda), more needs to be done to encourage and

strengthen potential private providers, especially small and local ones. Greater capacity building (including in billing, marketing, and access to finance) and greater partnership with local organizations can both help.

Access to finance remains a major hurdle. Constraints on access to finance can be eased with formal financial instruments such as guarantees. But there has been limited experience with this in the water sector, though a few guarantees and lines of credit to the banking sector are being tested in different settings. Where such financing instruments are less readily available, OBA schemes may need to phase in payments against reasonable milestones—as long as performance risk remains mostly with the service provider.

In addition, more work needs to be done to address the constraints of small local providers, those most likely to operate in rural and peri-urban areas. Some examples show the possibilities not only for pre-financing but for project financing in general.

- In the Kenya water project, K-Rep Bank has purchased a USAID Development Credit Authority partial credit guarantee to reduce the collateral required from the borrowers, namely community water associations (Virjee 2010).
- In Honduras, for private providers (including NGOs), limited commercial debt is possible (though with very short repayment periods), ultimately secured against municipal assets but with commercial lenders drawing comfort from an OBA grant mechanism payable by GPOBA. For public implementers, bridge loans are possible—government loans (issued at effectively zero interest) secured against future sector transfers from the central government to municipalities.
- In the Uganda project several measures have been tried, including phasing in outputs to reduce the amount of pre-finance capital needed as well as some capacity building for private operators and local banks. Still, private operators have relied more on their own cash and on working capital than on bank loans. But now that the operators are starting to deliver results, some local banks are showing renewed interest in participating (Azuba, Mugabi, and Mumssen 2010).

Demand creation is critical. Demand risk can be substantial in OBA schemes in the water sector. Poor people, often unfamiliar with the services or connection and payment procedures, may be slow to sign up. That can prolong project rollout and thus the wait before providers can be reimbursed. Community mobilization and outreach are critical. Both the rural community wa-

ter project in India and the Senegal On-Site projects use nongovernmental organizations (NGOs) to promote community participation and to improve uptake.

Capacity-building needs can be great. Shifting from input- to output-based approaches means new challenges for both public authorities and service providers. Capacity to implement and monitor OBA schemes is limited, especially in the countries where OBA is needed most. Providing targeted training, hiring independent verification agents, and involving NGOs in community outreach and private administrators in managing OBA funds are all solutions being used to ease capacity constraints.

The following aspects appear to be particularly important to the success of OBA in the water sector:

- Market structure and experience with competitive processes to encourage efficiency
- Regulatory or legal and contractual framework, including policies for setting and adjusting tariffs
- Capacity of implementing agencies—for example, to handle transaction processes, monitoring and verification, and the flow of funds as well as an understanding of and willingness to work with performance-based arrangements
- Extent of experience with the private sector in service provision, where relevant

Conclusion

OBA schemes involving both public and private providers are starting to show results, including efficiency gains through competitive bidding processes. Most importantly, these projects are increasing access to water and sanitation services for poor households.

However, OBA is only as sustainable as its environment and cannot be isolated from broader sector issues. Experience shows that for greater impact and

mainstreaming, a supportive enabling environment is critical. OBA schemes bring private sector expertise to poor areas that the service provider otherwise might not have served but can succeed only where legal or regulatory practices support private sector risk-taking.

As development partners scale up and widen the use of OBA, they should be encouraged to broaden its application to include funding for upstream policy and institutional reforms as well as other initiatives to improve utility or sector performance in ways that are measurable and therefore amenable to results-based approaches.

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¹ One additional OBA scheme identified in the water sector is outside the World Bank Group.

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