



The Global Partnership on Output-Based Aid

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Access to Finance in Output-Based Aid

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About GPOBA

GPOBA is a partnership of donors and international organizations working together to support the delivery of basic services in developing countries using results-based financing approaches.

What is OBA?

OBA is a results-based mechanism to increase access to basic services—such as infrastructure, healthcare, and education—for the poor in developing countries. OBA is used in cases where poor people are being excluded from basic services because they cannot afford to pay the full cost of user fees such as connection fees.

Output-Based Aid (OBA) and other results-based financing mechanisms are gaining popularity in the development context for many reasons, in particular, the desire to link scarce public funding with actual results on the ground. But withholding disbursements until the delivery of “results” or “outputs” requires that the service providers delivering the results must have access to finance (A2F) to pay for the “inputs” in the first place. Such finance is not always available or affordable.

Although OBA projects in principle require a mix of finance including project, household, and trade financing, what OBA specifically adds to the equation is a greater working capital requirement. This is often called “pre-financing” because it is separate from general project financing and is used to help bridge the gap for the service provider before receiving the output-based payment.

The financing requirements for OBA interventions vary depending on the nature of the scheme. In OBA projects with large private or public-private partnership arrangements making extensions from an existing network, the providers have tended to fund their OBA operations from their own working capital or arranged own bank financing. It remains to be seen how moving to scale will affect these arrangements—this needs to be explored further. But for smaller service providers, OBA schemes would introduce a serious timing issue which

will likely need to be resolved by working capital loans, even when a portion of the OBA subsidies/payments is advanced or phased-in to the service provider.

The purpose of this working paper is to outline some of the key issues related to OBA and A2F. The analysis focuses on the energy, water, and health sectors. Micro, small and medium enterprise (MSME) financing is the main topic; however, OBA is ultimately about poor households affording access to basic services, and many OBA schemes attempt to address A2F for households, so some of these innovations are also described. The working paper is expected to support a consultative process between experts dealing with A2F challenges and experts on OBA. This process should help raise awareness of the OBA approach among potential financiers, and help consider solutions (instruments, partnerships, capacity building) so that OBA and other similar results-based financing mechanisms can be brought to scale and integrated into broader sector policy, where appropriate.

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1. Introduction

Output-Based Aid (OBA) is a results-based financing approach which aims to improve delivery of basic infrastructure and social services to the poor through targeted public funding. The funding is only disbursed to service providers after pre-identified results have been delivered to the expected beneficiaries. Results are in the form of “outputs” or “outcomes”, for example, working water connections, solar home systems installed and maintained for a specified period of time, and the administration of vaccinations or safe-baby-delivery. Service providers are often from the private sector, which can usually best take on the required performance risk and respond to the output-based incentive; but OBA service providers have also included nongovernmental organizations (NGOs), community-based organizations (CBOs), and even public entities.

OBA and other results-based financing (RBF) mechanisms are gaining popularity in the development context for many reasons, in particular, the desire to link ever scarce public funding with actual results on the ground. But withholding disbursements until the delivery of results requires that those delivering the results must have access to affordable finance to pay for the “inputs”. Such finance is not always available, especially in those most challenging environments (regions, sub-sectors) where public funding is most required, and where accountability and delivery of results have proven problematic.

The purpose of this Working Paper is to outline some of the key issues related to OBA and Access to Finance (A2F). The analysis focuses on three sectors: energy, water, and health. The working paper is expected to support a consultative process between experts dealing with A2F challenges and experts on OBA. This process should help raise awareness of the OBA approach among potential financiers, and help consider solutions (instruments, partnerships, capacity building) so that OBA and other similar results-based financing mechanisms can be brought to scale and integrated into broader sector policy, where appropriate.

2. What is OBA?

Defining OBA

Output-based aid (OBA) ties the disbursement of public funding in the form of “subsidies” to the achievement of clearly specified results that directly support improved access to basic services.

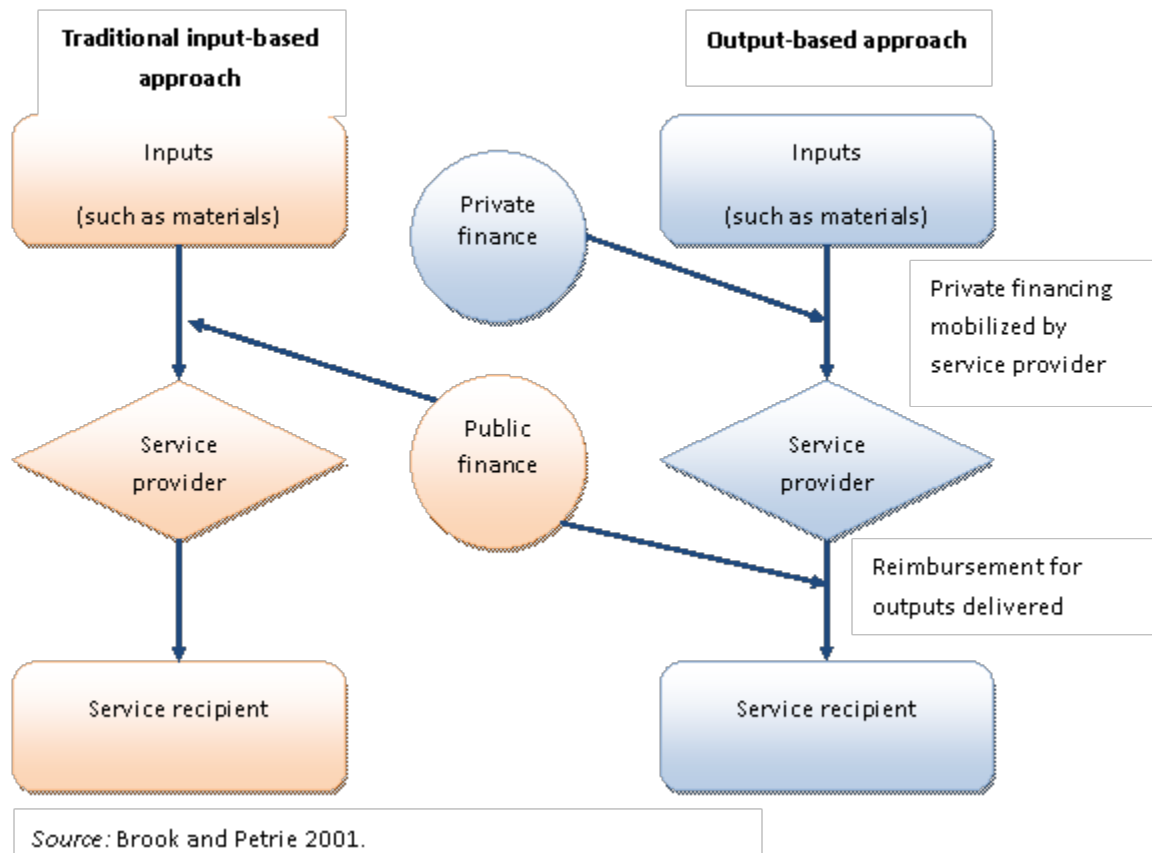
- a) Basic services include improved water supply and sanitation, access to energy, health care, education, information communications services, and transportation. Outputs are defined as closely to the desired outcome or impact as is contractually feasible. For example, an output might be the installation of a functioning household connection to the electricity network. In some cases, an output might also include a specified period of electricity delivery demonstrated through billing and collection records. The intended outcome of such an output-based scheme would be, for example, to reduce indoor household pollution or increase opportunities for education through better lighting.

The intended development impact could include, for example, a reduction in morbidity or increased lifetime earnings.

- b) Subsidies are defined as public funding used to fill the gap between the total cost of providing a service to a user and the user fees charged for that service. Policy concerns such as improving basic living conditions for the poor or reducing disease may justify the use of subsidies.

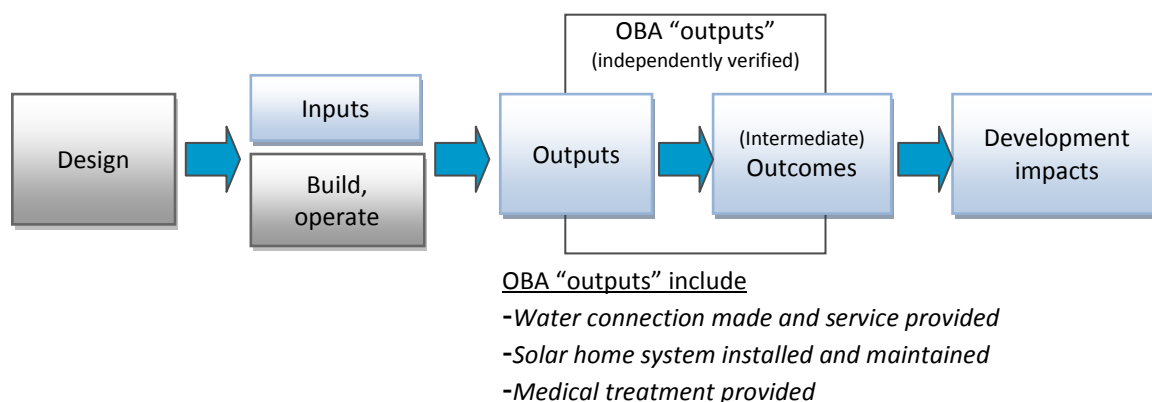
Performance contracts have been implemented for several decades, using both public and private operators. However, outputs in OBA schemes are generally more narrowly defined than benchmarks in traditional performance arrangements, which in some cases may be more input oriented. Subsidies have also existed in the infrastructure and social service sectors. OBA refines the targeting of subsidies by bringing them together with performance-based arrangements through the explicit linking of subsidy disbursement to the achievement of agreed outputs. Figure 1 provides a simple contrast of a traditional input-based approach to an output-based approach.

Figure 1 Contrast of a Traditional Input-Based Approach to an Output-Based Approach



Another way of looking at how OBA differs from input-based approaches is to analyze the contracting spectrum often seen in infrastructure and social service delivery. Under traditional procurement, private infrastructure services are contracted at the “input” end of the spectrum: the government purchases specific “inputs” and uses them to build assets and provide services itself (see Figure 2). Under OBA schemes, services are contracted to a third-party provider, and that contract or other official arrangement is the mechanism through which the output-based disbursement criteria are established. The third party in OBA schemes is typically a private enterprise but could also be a public utility, an NGO, a CBO, or even a government branch or institution separate from the entity providing the official public funds.

Figure 2 Contracting Spectrum



Contracting “closer to the input end” (for example, for the construction of water treatment plants) does not guarantee that the inputs the government purchases actually lead to the outcomes (for example, a reduction in waterborne diseases) or impacts (for example, decreased morbidity) the government wants. Because outcomes and impacts are a combined product of what the provider can influence and other factors outside the service provider’s control, governments seeking to pay on outcomes and impacts are unlikely to find a willing, credible, and affordable service provider. However, governments can contract for an output related as closely as possible to the desired development outcome or impact while leaving performance risk still largely under the service provider’s control. This is the rationale behind output-based aid.

OBA schemes normally apply performance-based subsidies in three ways: one-off subsidies such as connection subsidies, transitional tariff subsidies that taper off as user contributions increase, or ongoing subsidies. The subsidy design chosen will depend on factors such as the sustainability of the funding source, the capacity for administering the subsidy scheme, the type of service to be subsidized, and the extent to which the service provider is willing and able to be paid over time. To ensure sustainability and that service providers take on appropriate demand risk, OBA can also involve some element of payment on intermediate outcomes—for example, disbursing a portion of payments (subsidies) on the actual use of electricity or ICT services. However, the further one goes along the output-outcome-impact spectrum, the

greater the risk the service provider bears. Therefore, consideration must be given to whether the provider is reasonably able to bear that risk—and at what cost.

Universe of OBA¹

World Bank funding for OBA has grown considerably since the time of the official launch of OBA in 2002-03, from 32 projects identified with \$1.5 billion in funding to about 129 projects with nearly \$4 billion in funding. The sectors covered include information and communications technology (ICT), roads, energy, water and sanitation, health, and education. The first projects were in the Latin American region but OBA has subsequently spread to all regions.

The nearly fourfold increase in the number of OBA projects in the World Bank Group (WBG) in the six years since the approach was “initiated” is due to a variety of factors. These include an increased emphasis on results; new evidence that many existing subsidy schemes, such as quantity-based subsidies embedded in tariffs, often have a regressive targeting incidence (Komives et al. 2005); a recognition that for private-public partnerships to be successful, specific attention needs to be paid to pro-poor service delivery; and, the creation of the Global Partnership on Output-Based Aid (GPOBA) to pilot, document, and disseminate information on OBA projects.

Although the OBA portfolio has been growing substantially, to put this growth in context, OBA is only a small share of the World Bank portfolio at about 3 percent in total. Several factors contribute to this low percentage, in addition to the fact that OBA is not yet “mainstreamed.” For example, the WBG’s OBA portfolio includes only projects that aim at increasing household access to basic services, while the overall portfolio includes projects financing large upstream investments, wider sector-reform programs, and analytic and advisory activities.

OBA projects are delivering results. The projects identified (not including new projects currently in design) are expected to reach at least 94 million beneficiaries worldwide.² Included in this is GPOBA’s portfolio of 31 OBA subsidy schemes with \$124.9 million in funding, expected to benefit around 6.5 million people. These GPOBA pilots are showing results: 18 projects have delivered verified outputs benefiting nearly 755,000 people. GPOBA is gathering lessons from all these OBA projects both within and outside the WBG, to help inform development practitioners of the challenges and benefits of such an approach. OBA schemes seem to have real advantages in terms of helping target public funding to the beneficiaries that need it most and therefore reducing “leakage”; increasing accountability of service providers and transparency in the use of public funds; galvanizing the private sector to serve populations it might not otherwise serve; and internalizing the monitoring of results.

Development outcome ratings obtained from World Bank Implementation Completion Reports provide some evidence that the OBA projects reviewed have been more effective in achieving development

¹ Data taken from Mumssen, Johannes, and Kumar 2010. See this publication for further information and references.

² GPOBA Annual Report 2010. Available at: <http://www.gpoba.org/gpoba/node/530>

outcomes than traditional projects. Results are similar for ratings of the quality at entry and quality of supervision of projects that is assessed by the World Bank's Independent Evaluation Unit. More information on the relative effectiveness of OBA in relation to the OBA benchmarks and criteria is discussed in Mumssen, Johannes and Kumar 2010, including data supporting the case that transferring performance risk has led to a reduction in cost overruns and benefit shortfalls in OBA projects compared to traditional aid approaches.

Where Does the Funding Come From?

Funding for OBA schemes has come from the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), GPOBA, other donors such as the German development bank, KfW, and governments themselves using, for example, tax revenues and cross-subsidies collected from users. IDA and IBRD are the biggest and main contributors to OBA schemes. The remaining projects of the WBG portfolio either have received or will receive funding from GPOBA.³ GPOBA is a World Bank-administered program created in 2003 by the United Kingdom's Department for International Development and the World Bank. New donors have since joined GPOBA, including the Netherlands' Directorate-General for International Cooperation (DGIS), the Australian Agency for International Development, the Swedish International Development Cooperation Agency, and the International Finance Corporation (IFC).

GPOBA has to some extent focused on designing and developing OBA schemes in areas where OBA has been less tested, for example in IDA countries and in the water and sanitation sector. Two thirds of the GPOBA projects are in IDA countries, and they account for over three quarters of GPOBA funding volume. Nearly half of GPOBA projects are in the water and sanitation sector, followed by energy. Although OBA was originally envisioned as a tool to enhance private sector participation, GPOBA has attempted to pilot OBA with commercially viable state-owned enterprises in sectors where public utilities have continued to play a dominant role in service provision.

Bilateral donors are playing an active role, such as KfW in the health and renewable energy sectors, or DGIS of the Netherlands, through the Energizing Development program implemented by GTZ, the German technical cooperation agency, in the energy sector. More generally, in developing countries, OBA schemes that do not involve donor support are mainly found in middle-income (IBRD) countries that are able to fund subsidy schemes largely from cross-subsidies or tax revenue. We are also starting to see government participation in OBA schemes in low-income countries, for example, by the Ugandan and Kenyan governments in their respective energy sectors for targeted electrification schemes.

³ A number of (mainly IBRD) projects have also received substantial amounts of complementary subsidy funding from the recipient governments worth a total US\$2.8 billion. Including government cofinancing, the total OBA subsidy portfolio for WBG projects is about US\$6 billion.

3. Summary of A2F Challenges in OBA⁴

Overview

OBA projects, in principle, require a heterogeneous mix of finance including:

- (i) project finance to support service providers (SPs) in expanding the services they are contractually bound to provide;
- (ii) financing, possibly in the form of working capital, to enable SPs to deliver the agreed outputs/services to the customer before the SP is paid;
- (iii) trade finance when items such as solar panels need to be imported; and,
- (iv) working capital to finance households who purchase the services such as connections for safe drinking water, solar heating systems (SHS), or co-payments for health care services such as vaccinations or pre-and post-natal care.

While this diversity of finance would appear to be important, **it is important to note that what OBA specifically adds to the financing equation is that under OBA, SPs are paid after outputs are delivered, which normally implies a timing gap between service delivery, verification, and payment, hence a much greater working capital requirement.** This is often called “*pre-financing*” because it is separate from general project financing, and bridges the gap for the SP “*ex ante*” to OBA disbursement. **Therefore, this paper and most of the working solutions will tend to focus more on point (ii) above.**

However, for OBA interventions to successfully and sustainably deliver services to potential beneficiaries, all forms of financing as described above ultimately need to be addressed. For example, the extent to which SPs will require project financing for long-term investment – point (i) above— will depend in part on how much of the investment costs are not subsidized, and instead are spread out across the tariff.⁵ In those cases, the A2F solution should address both project financing and working capital needs.

Similarly, without addressing household financing needs (point iv above), households would not be able to purchase the “outputs”, e.g. SHS, on-site sanitation schemes, connections to networks, etc. But this is not an OBA-specific issue since such household financing needs would arise under most any infrastructure and social services scheme where users are expected to contribute to the “access” costs through for example, connection and installation fees. **Therefore the analysis in this working paper does not focus on the financing needs of households per se.** But as with project finance, in many instances OBA schemes would not work without appropriate household access to finance. Plus, many OBA schemes do attempt to address A2F on the part of households, since OBA is ultimately about

⁴ All projects mentioned are described in more detail in the table in the Annex to this working paper.

⁵ Such financing requirements for OBA schemes have so far been limited because OBA tends to focus on the poor, and poor households tend to benefit from social tariffs or similar, which do not recover extensive (or sometimes any) investment costs, usually because of cross-subsidies from non-poor customers who pay higher tariffs.

household access to basic services. Some of the household-related finance innovations are described in this working paper.

The diversity of financing requirements has varying implications depending on the nature of the output and service, and the type of SP. Some of the service providers in OBA projects are relatively large private or public-private companies. This is true particularly in projects that extend the electricity and water networks to poorer populations and ICT projects operating under concession-type contracts. The larger SPs can either fund these projects from their working capital or often can arrange their own bank financing for these projects. These same large SPs are likely to be able to address trade financing needs in a somewhat similar manner.

This is not the case for the smaller service providers, particularly those that operate in peri-urban and rural areas, or for health service providers who may well lack the financing for an adequate level of supplies or personnel to scale-up the clinic to service an increased number of poor people seeking their services. For smaller SPs, when project financing may not exist, financing is largely a timing issue and could be resolved by working capital loans.

The SPs in OBA schemes often bid competitively on projects (often through “lowest subsidy required” tenders), and as part of their bid may elect to finance a portion of the service extension with their own capital. Therefore, subsidies may only cover a proportion of service installation costs. The cost carried by the SPs will need to be recovered over time from user fees to the extent user fees/tariffs allow. With respect to the subsidy element, the SP may receive an advance of up to 10 percent from the project and then may be paid subsidies on an intermediate basis, based on contractually agreed service milestones or at the end of the service contract when meeting service delivery to a contractually agreed number of households. Often there is a tail to the project so that up to 20 percent of the subsidies may be held back until six months to a year after service. Therefore, for a two to three year project the SP might require working capital loans to cover costs until milestone payments and user fees cover the SP’s costs. For large and medium size SPs an intermediate term loan with two years of grace on principal repayments would appear to work well.

The primary financing need for OBA projects to reach scale is at the enterprise level — primarily micro, small and medium service providers — who require working capital to deliver outputs such as solar home systems, primary health care treatments or safe drinking water through piped-water connections. But to date, most OBA projects (including projects in design, implementation or closed) have not used any formal instruments or forged partnerships with financial institutions such as micro-finance institutions (MFIs) to enhance micro, small and medium-sized enterprise (MSME) finance. There are a handful of exceptions such as the Kenya Community Water project described in Box 2, and the SHS projects in Sri Lanka and Uganda which have used an IDA credit to refinance working capital loans made by participating banks to solar dealers.⁶ The tenure of the on-lent IDA credit is typically ten years. The IDA

⁶ Refinancing facilities as identified by this study generally involve on-lending the (e.g., IDA) credit to the financial institutions (rural banks and MFIs) that are lending to either households or to dealers/service providers.

credit provides up to 80-90 percent long-term liquidity on loans made to dealers, thereby limiting the smaller lending institution's exposure to just 10-20 percent of the overall loan amount.

The (re)financing facilities have had only limited success in enhancing MSME finance because they (primarily) address long-term liquidity risks but not the credit risk -- in other words, such a facility is not a guarantee mechanism. As a result, in Uganda, the lenders preferred to finance well established SPs and remained reticent to finance projects where there are some questions about sponsor capacity and construction risks. In Sri Lanka, the uptake was low as the amount refinanced, due to World Bank rules, was limited to the incremental part of permanent working capital. Therefore, more commercially oriented financing that is tailored to the needs of the SPs and/or customers may be more appropriate in these cases.

From the household perspective, most OBA projects require upfront user contributions ranging from as low as 10 percent to as high as 70-80 percent in the case of the Nepal Biogas project. This upfront payment can be made in cash by the user themselves or through a micro loan from a bank or MFI. In the case of projects with large providers such as Morocco Urban Water or Colombia Natural Gas, the service providers give households the possibility of paying the full connection cost in installments. Micro-finance has also been integrated into OBA schemes to increase household affordability. Examples are provided in the sector-by-sector analysis. It is interesting to note that the use of financing facilities which support bank/microfinance institution lending to households has been more prevalent than such facilities lending to service providers/MSME.

Sector-by-Sector

Energy Sector

The use of OBA in the energy sector is most widespread in individual off-grid systems, where the "outputs" are often defined as the installation of a functioning off-grid unit, such as solar home systems (SHS). The service providers (SPs)/vendors are typically small or medium enterprises (SME)⁷ but there are a few large SPs as well such as Grameen Shakti and BRAC (Bangladesh). Subsidies and investments are typically pre-financed by a combination of internal cash flow, supplier credit, upfront user contributions, subsidy advances, and debt (from both formal and informal sources such as family and friends). Access to commercial debt is fairly limited due to the lack of sufficient collateral among the SPs.

Improving access to finance is critical to project success: experience to date shows that A2F constraints faced by small and medium SPs affect cash flow and future growth prospects/scale-up plans. However, most World Bank funded off-grid OBA projects have focused on ways to alleviate household finance

⁷ IFC definition of MSME -

Indicator	Micro Enterprise	Small Enterprise	Medium Enterprise
Employees	<10	10<50	50<300
Total Assets	<\$100,000	\$100,000<\$3 million	\$3 million < \$15 million
Total Annual Sales	<\$100 000	\$100,000<\$3 million	\$3 million < \$15 million

constraint (see Box 1) rather than enterprise finance. In only the Uganda and Sri Lanka cases does an IDA credit refinance the working capital of solar dealers.⁸

Box 1 - Solar Photo-Voltaic Systems for the Rural Poor in Ghana

The project's objective is to increase electricity access to about 15,000 poor rural households in remote regions of Ghana by subsidizing installation of solar home systems (SHS). This GPOBA-funded (US\$4.75 million) scheme is part of the Ghana Energy Development and Access Project, under which an IDA credit of US\$3 million provides household financing and a Global Environment Facility grant of US\$3.5 million provides technical assistance. The IDA Credit provides the necessary long-term liquidity to the participating rural banks and allows them to provide loans to customers given the high cost of the SHS relative to household income, with repayment terms of up to three years (as opposed to current short-term loans up to 6 months). The participating rural banks refinance 80 percent of loan amounts from the IDA credit.

The vendors use their own funds to purchase the equipment upfront, for marketing, and to set up service centers. In addition, the 10 percent down payment from households helps with cash flow. The project also requires rural banks to pay the installed costs to dealers within one month after installation and verification. But according to a July 2010 report submitted to GPOBA, the dealers were generally unprepared for the high levels of demand and could not finance their imports fast enough to keep up with their orders. The IDA credit does not support loans made to SHS dealers as it focuses on the household side. The project team is now exploring ways to meet the working capital and long-term investment needs of dealers, for example by:

- Piggybacking on the existing WB-IFC Micro-Small-Medium-Enterprise (MSME) project that is intended to provide working capital and guarantees for SMEs like solar dealers.
- Working with institutions that provide microfinance loans such as Ecobank to dealers who would qualify for term financing, which could be used to leverage the necessary trade finance or letters of credit.
- Engaging with E&Co, a specialized financing company focusing on providing credit to sustainable energy operations in developing countries, which has already provided some credit.

One off-grid SHS scheme (for which GPOBA has recently contributed OBA funding) which addresses financing from both the service provider and household angle is the rural off-grid scheme in Bangladesh (see energy table in annex). An IDA credit enables service providers in Bangladesh to extend credit to households on different terms and conditions. At the same time, the scheme is designed around microfinance institutions such as Grameen Shakti playing the role of SHS dealers/service providers, who therefore in essence benefit from the financing facility since the IDA credit is on-lent to them. The loan tenor the MFIs can therefore offer customers varies from 1 to 5 years, and the interest rate varies from 8 percent to 15 percent per annum on declining balance method. But in all the instances, the repayment frequency is monthly. The scheme has been extremely successful in increasing access by households to SHS and many donors are participating to increase the program's reach.

⁸ Both the Uganda and Sri Lanka programs mentioned involve refinancing of loans to customers for SHS purchase.

OBA is also used in grid and mini-grid schemes. Upfront capital expenditures as a percentage of total costs are very high in the case of mini-grids and service providers are typically small. Therefore, a larger fraction of the subsidy has to be paid upfront (on achieving construction milestones) to avoid increasing the financing costs and hence the subsidy levels. Nicaragua’s offgrid rural electrification project (PERZA) disburses 70-80 percent of the subsidies against installation of turbines and grid, and the remaining 20-30 percent against final outputs such as new connections and service quality. Grid-based OBA schemes on the other hand typically involve larger service providers as they require significant capital investments. These service providers usually use internal cash flow/working capital to pre-finance the output-based subsidies. An example is the GPOBA-funded (US\$5.1 million) Colombia natural gas project which has successfully connected 35,000 poor families to the natural gas distribution network. The service provider, Promigas, is Colombia’s largest private gas transmission and distribution company.

Water Sector

Large private operators such as Suez and Veolia are implementing 6 of the 22 water and sanitation OBA projects identified in the WBG. These large SPs can typically fund the projects from their own working capital or arrange commercial financing. However, in the case of a water project in Cameroon where Camerounaise des Eaux is operating under a 10-year lease-type contract, the public asset-holding company, as opposed to the private management company, takes on the pre-financing risk. OBA projects with larger SPs typically withhold a larger chunk of the subsidy until satisfactory service delivery—from 10 percent in Bangladesh to 100 percent under the Manila water supply project where the entire subsidy is paid after connection verification and 3 months of satisfactory service delivery.⁹

Access to finance is more of a challenge for small and medium SPs. Subsidies are typically phased in to these projects to help with the SP’s cash flow/liquidity. For example, in the case of the greenfield water schemes in the rural growth centers of Uganda, phasing in of subsidy payments was required, with 55 percent of investment costs reimbursed against intermediate milestones and 45 percent of the subsidy paid on working connections and water delivered. On the other hand, the brownfield investments in small towns in the same Uganda pilot were undertaken as a “pure” OBA where all payments were withheld until final outputs of connections and some water supplied, as the working capital and investment requirements were not deemed as onerous for the SPs. In both cases, the small and medium SPs in Uganda rely more on internal cash and supplier credit than on commercial bank loans. In only one case did an SP utilize a commercial loan.

Commercial borrowing has been used in the India Improved Rural Community Water in Andhra Pradesh project for both pre-financing the subsidy and making long-term investments of approximately \$200,000.

⁹ The OBA subsidy is not withheld for too long because of financial viability, often related to A2F but also other factors. Therefore “sustainability” with regards to the enabling environment must also be taken into consideration. All GPOBA-funded schemes are expected to be embedded in a robust contract with appropriate regulatory mechanisms, including monitoring of service quality. But in reality, more low-income environments appear to have weaker capacity, although there are always exceptions.

The commercial lenders drew comfort from the GPOBA-funded grant agreement mechanism. The grant funds were secure and reserved for the project and were disbursed on successful verification of outputs¹⁰.

Another interesting example is the case of the Kenya Community Water project which involved community-based organizations playing the role of water service providers. In this scheme, a partnership was forged with a micro-finance institution, K-Rep Bank, and a USAID partial credit guarantee was put in place (see Box 2).

Box 2 - Kenya Community Water: Combining OBA with Micro-finance

This project facilitates access to finance for small community-based water providers by blending output-based subsidies and commercial finance. The project is being implemented by K-Rep Bank, a local commercial bank specialized in microfinance lending, with support from the Water and Sanitation Program, GPOBA, PPIAF, and the European Union's Water Facility. This project is funded on a project finance basis. The community provides equity (20 percent of project cost); at least half must be in cash. K-Rep finances the remainder of the project cost, through a loan using its own resources. Loans are priced based on K-Rep's internal risk assessment. The maximum loan tenor is five years. The longer tenor of the loan is made possible through the output-based subsidy which repays up to half the loan (40 percent of project cost), typically after 18 months. It also makes the monthly repayments more affordable for the community. In addition, K-Rep has purchased a partial credit guarantee from USAID's Development Credit Authority for 50 percent of the loan principal. The guarantee helps reduce the collateral requirements from the community-based water providers¹¹.

Many of the projects have upfront user contributions in the 10-25 percent range. Three of the projects involve installment schemes offered by the (large) SP to help users spread their contributions over time. The Senegal On-site Sanitation project is working with PAMECAS, the largest MFI in Senegal, to help users with their contribution, which also helps increase demand uptake.

Health Sector

The amount of upfront capital investment and the consequent need for financing varies depending on the services covered. Projects involving secondary and tertiary care ("specialized treatments") require specialized facilities and equipment and hence are more capital intensive than those concentrating on primary care delivery. One such health project with a significant amount of upfront private investment is the GPOBA-funded Lesotho Hospital Project where IFC acted as transaction advisor. The 18-year PPP arrangement requires the Netcare consortium to provide all the agreed services on an output basis in return for a monthly service payment. Total construction costs of the hospital are estimated at US\$100

¹⁰ The implementing agency, the Naandi Foundation, is a well established NGO, and the project was in collaboration with WHI, an internationally-renowned water technology company. Not all OBA schemes can claim such credit-established SPs.

¹¹ Such guarantee can be used against default by the SMEs and usually covers up to 50-60 percent of the risk. If properly structured, the partial risk guarantee operates as a form of insurance pool with the banks paying the partial risk guarantee facility at a 1-2 percent fee for the risk coverage. The banks naturally pass that cost on to the borrower.

million, with the Government contributing approximately 35 percent of the capital costs and the remaining 65 percent of the financing coming from commercial borrowing (Development Bank of Southern Africa) and equity. But this project is larger than most OBA schemes, which normally do not involve such large PPP arrangements, and therefore may not be as readily able to attract such financing.

Voucher and fee-for-service schemes are commonly used for basic primary care interventions such as mother-baby packages, immunizations, malaria treatments, and STD treatments. These schemes typically involve multiple small-scale service providers who compete for patients and are reimbursed a fixed fee for each intervention after services are delivered and independently verified. Service delivery does not require specialized facilities and usually relies on existing facilities, which reduces the need for upfront investment from small-scale service providers. Experience in the Uganda reproductive health project has shown that individual service providers use proceeds from voucher treatments to expand facilities over time. But payment delays have been reported in many projects (Afghanistan, the Democratic Republic of Congo, Republic of Yemen) and this causes cash-flow constraints at the SP level. It is therefore critical to minimize the time taken to reimburse the service providers after the services are rendered and independently verified to avoid cash flow problems at the SP level. During the mid-term review for the Uganda Reproductive Health project in February 2010, it was found that on average it takes only 18 days to process claims.

Most health projects have a two-tier output-based contract structure. In addition to performance-based contracts between the service provider and the project administrator (e.g., a voucher management or insurance agency), the project administrator also has a performance contract with the project sponsor (e.g., government or donor). Access to finance has been an issue at the project administrator level as well. In the case of the Yemen Safe Motherhood Project, the project administrator, an NGO, faced cash-flow problems due to its inability to pre-finance activities related to enrollment of beneficiaries and health education/awareness. To alleviate the cash flow problems, the project has now been restructured to allow advances to the project administrator to fund its expenses related to enrollment and awareness. To help with liquidity and to ensure swift disbursement of funds to the service providers, many output-based health projects involve some advances to the project administrator.

4. Mitigating the A2F Constraint

It would appear that most OBA projects at present do not systematically provide for financing from commercial banks and/or MFIs. How can the constraint to A2F in OBA projects be reduced?

Broadly, GPOBA could consider an education program for donors, international financial institutions (IFIs), and private funders of micro and small business programs as well as socially responsible investors in the private sector. This program would include a series of short notes, workshops, and seminars on OBA and its linkages to A2F through CGAP (the Consultative Group to Assist the Poor), the Center for Financial Inclusion at Acción, the Council of Microfinance Equity Funds (CMEF), and regional microfinance networks located throughout the world.

More specifically, financing for OBA projects should be supported by a variety of partners, including, as examples, the following:

- (i) **IFIs** could play a role, including IFC and IFC's bilateral equivalents which support micro and small business finance, green and social financing initiatives. In addition to IFC, KfW, FMO (Netherlands), and the European Investment Bank (EIB) are other examples.
- (ii) An increasing number of **foundations** finance a similar range of projects and institutions to the IFIs, e.g. the Calvert, Ford, Omidyar and Soros (Open Society Institute) Foundations.
- (iii) An increasing number of **donors** and **nonprofits** are considering offering partial credit guarantees on OBA schemes, including USAID, Sida and the Acumen Fund.
- (iv) In addition, **private investors** have streamed into the microfinance sector, largely through special purpose vehicles (SPVs) and debt and equity funds. Some are increasingly active in green and social investment projects, for example, Blue Orchard's and responsAbility's social equity funds and Acción's Pioneer Fund.
- (v) **Microfinance network groups** (whose subsidiaries and affiliates increasingly also finance small businesses) with 20-40 affiliates/subsidiaries around the world include: the ProCredit Group; Acción International; FINCA; Opportunities International; Grameen replicas throughout Asia; and BRAC with affiliated or subsidiary micro operations in Asia, Afghanistan, and more recently Africa, and which also operates a publicly listed SME bank in Bangladesh. There are also diversified social service networks actively involved in microfinance such as Save the Children, Oxfam, Catholic Relief Services, MEDA, and Care.
- (vi) **Funds management groups** could potentially establish SPVs to finance OBA projects. Examples of such groups include Aueros focused on Africa; Omtrix, Inc. which currently manages a series of niche funds in Latin America; Triodos Bank, a commercial bank in the Netherlands with three funds focused on micro and small business financing; responsAbility Funds and Blue Orchard which manage both debt and equity funds focused on micro and small business; and Grass Roots, a global equity fund.
- (vii) Large, financially sustainable **MFIs** operating in markets in which OBA projects are active could play a role. K-Rep, Grameen, BRAC, and BRI are examples of MFIs that have already engaged with OBA projects.
- (viii) **Commercial banks** that finance SMEs in specific countries in which OBA projects are active could also provide support.

These latter two categories can be reached on a project-specific basis. The other potential sources of financing cited above can be reached on a systematic basis. For instance, a systematic approach could be used to encourage commercial banks and MFIs to participate explicitly in OBA projects funded by the

World Bank or another donor (IFC or KfW-funded projects often provide credit lines or re-financing facilities). Each project would have an A2F financing component intermediated by carefully selected banks and MFIs. Financing could include, inter alia:

- Term loans of 5-8 years with 2-3 years of grace for SPs intermediated by commercial banks or SPVs.
- Working capital loans for dealers for 3-5 years, repaid on a monthly or quarterly installment basis, and intermediated by commercial banks or MFIs that do both small and micro loans.
- Short-term working capital loans for customers of the services over 12 months to 2 years, repaid in monthly installments and intermediated through MFIs. In some cases, there may need to be longer-term loans to finance customer loans for SHS to increase affordability and hence ensure uptake.

Other financing mechanisms to consider:

- Partial risk guarantee facilities to enhance the attractiveness of SME loans to dealers. Partial risk guarantee facilities are generally created by governments in developing countries to provide incentives to SME lending. If properly set up, the facility operates as an insurance pool with a 1-2 percent fee charged to the banks with 40-60 percent of the loan guaranteed in the event of default. The banks normally pass on the fee to the SME.
- Refinancing lines that allow banks to receive up to 60-80 percent reimbursement on loans to dealers through a discount window. (Note: Current facilities supported through IDA credit lines refinance up to 80-90 percent, which is quite high. One of the criticisms of this level of refinancing is that the refinance facility is not mobilizing significant private sector funding required in the sector.)
- Some SPVs and service providers may require equity or quasi-equity to scale-up their business to serve an increased number of clients. The microfinance sector has attracted financing through both debt and equity funds. Starting with one investment fund focused on Latin America in 1995, managed by Omrix, Inc., there are currently more than 70 debt funds and some 30 or more equity funds active in the sector at present. For example, there are regional funds focused on Latin America, Asia, the Balkans, or Africa, global funds, and a number of niche funds. There are also an increasing number of funds attracted to social and green investments. It is likely, in time, that fund managers will be attracted to OBA and will create SPVs focused on financing renewable energy or green projects, the delivery of potable water to the poor or increased delivery of health services to the poor through OBA. GPOBA could potentially stimulate market demand by working with IFC and/or other IFIs to provide funding to experienced microfinance, green or social fund managers to finance OBA projects. The creation of a few funds focused on financing OBA projects would catalyze entry by IFIs and private sector investors at present looking to diversify their product offering.

5. Next steps

GPOBA will be sponsoring a series of workshops and discussions with key stakeholders to discuss OBA and the A2F challenge for a more fruitful scale-up of much needed results-based financing mechanisms. This consultative process will include engaging with the stakeholders and organizations mentioned in Section 4 above, but also others. The first of this series of consultations will take place in Washington, DC, at the World Bank, alongside the CMEF annual meeting in October 2010, and separate discussions will also be held with CGAP.

Feedback from such consultations will ideally lead to new instruments and/or partnerships to help mitigate the A2F challenge posed for small and medium enterprises working on OBA schemes. Large service providers might also benefit, as they may need support as OBA and other results-based financing mechanisms are rolled out.

In addition, such consultations should lead to the increased awareness of OBA as a donor- and government-supported mechanism. When non-profit organizations, civil society organizations, and private project sponsors confront a situation where access to basic services by poor households is a concern, these consultations (and this paper) might instigate stakeholders to consider/propose OBA and other similar results-based financing approaches that help target public funding to the poor in an efficient and transparent manner.

References

- Komives, Kristin, Vivien Foster, Jonathan Halpern, and Quentin Wodon, with support from Roohi Abdullah. 2005. *Water, Electricity, and the Poor: Who Benefits from Utility Subsidies?* Washington, DC: World Bank
- Mumssen, Yogita, Lars Johannes, and Geeta Kumar. 2010. *Output-Based Aid: Lessons Learned and Best Practices*. Washington, DC: World Bank

GPOBA

OBA Energy, Water, and Health Projects

Background for A2F Working Paper

October 2010

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
GRID-BASED ENERGY PROJECTS								
Armenia	Access to Gas & Heat Supply for Poor Urban Households	Private	Large	Advance	3,100,000	3,290,000	GPOBA	It is difficult to trace how a large company funds its working capital needs (money is fungible and it is not possible to trace which part of pre-financing for this specific project came from the internal cash flows versus short-term borrowing). Arexim Bank, a private bank with majority Russian ownership, is servicing the SP (HRGA) and also financing its working capital needs.
Armenia	Urban Heating Project	Private	Large	Advance	3,000,000	3,415,000	IDA	Same as the GPOBA-funded project above. (This is the IDA-funded project.)
Colombia	Natural Gas Distribution for Low Income Families in the Caribbean Coast	Private	Large	None	5,085,000	13,669,270	GPOBA	SP used internal cash flow to prefinance the subsidies.
Ethiopia	Ethiopia Electricity Access Rural Expansion Project II (EAREP II)	Government	Large	None	8,000,000	25,142,825	GPOBA, IDA, Arab Bank for Economic Development in Africa (BADEA), Kuwait Fund, AfDB, the Indian Government	The service provider is a large public utility, EEPCP. The GPOBA-funded scheme's objective is to accelerate the pace of connections in rural towns and villages with grid access, by assisting EEPCo in its program to finance the cost of the connection fee. A grant from GPOBA covers EEPCo's costs of financing the loans extended to poor household customers.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Guatemala	Guatemala Rural Electrification Scheme	Private	Large	None	150,000,000	150,000,000	MIGA	The \$96.6 million MIGA guarantee was extended to Union Fenosa Internacional S.A., of Spain, for its equity investment in and loan to its subsidiary distribution companies, DEOCSA and DEORSA. The guarantee will protect the project against the risks of transfer restriction, expropriation, and war and civil disturbance.
India	Improved Electricity Access to Indian Slum Dwellers	Private	Small scale licensed electricity companies (LEC)	None to LECs (10% advance to Reliance Energy, the implementing agency)	1,650,000	6,650,000	GPOBA	The upfront user contribution helps LECs with prefinancing the subsidy, meeting some of its working capital needs.
Kenya	Kenya Electricity Expansion Project	Mixed	Large	None	5,000,000	TBD	GPOBA, IDA	The project is currently under design.
Liberia	GPOBA W3 - Liberia Electricity Access	Private	TBD - International bidding has not commenced	Intermediate (proposed)	5,000,000	TBD	GPOBA, IFC	The project is currently under design.
Senegal	Senegal - Electricity Services for Rural Areas Project (PPER)	Private	Large	Advance and Intermediate	6,000,000	15,000,000	IDA, IFC, AfDB, IDB	The advance payment (first tranche of 30%) and the equity should help with working cap requirements prior to OBA payment. Since the connections will be made in batches, this advance acts like a revolving fund that will be replenished as the OBA subsidies is paid on output delivery. ONE has received long term debt from the Islamic development bank (IDB) for this project. IFC has made an equity contribution in the project company, Comasel St. Louis.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Tajikistan	Pamir Private Power Project	Private		None	10,000,000		IFC, IDA, Swiss Government, Agha Khan foundation for economic development (AKFED)	The \$26 million investment project was implemented through a special-purpose company, Pamir Energy Company, a joint venture between AKFED (70 percent) and IFC (30 percent). The project is financed through a debt-equity ratio of 55 to 45. IFC provided both debt (\$4.5 million) and equity (\$3.5 million) financing. Additionally, IDA provided \$10 million concessional loan. The social protection scheme (lifeline and transitional tariff subsidy) estimated at \$ 9 m over a 10 year period is funded by a Swiss grant of \$ 5 million and the revenues arising from the interest rate spread of 5.25 percentage points on the on-lent IDA credit.
Uganda	Energy for Rural Transformation Project Phase II	Private	Large	TBD	9,000,000	30,000,000	GPOBA, IDA	The main objective of the Credit support facility (CSF) under the IDA project is to facilitate the flow of commercial debt finance to private investments. The IDA credit support facility also provides borrowers the option of purchasing a partial risk guarantee (PRG) at the point of loan origination.
OFF-GRID ENERGY PROJECTS								
Bangladesh	Bangladesh Rural Electrification and Renewable Energy Development (IDCOL SHS)	Private (including NGOs)	Small, medium and Large	None	8,200,000	44,719,600	GEF, IDA, KfW, GTZ	SHS dealers receive three months supplier credit.
Bangladesh	Rural Electrification and Renewable Energy Development - Mini Grid Project	Private	Small, medium	None	1,100,000	4,100,000	GPOBA, IDA	SPs are required to put forward at least 20% of the project cost as equity. The remainder is financed through a mix of loans from IDCOL (financed by IDA credit) and GPOBA grants (which can make up a maximum of 50% of the capital cost of the system). IDCOL, the implementing agency, also provides bridge financing for the grant portion when the project is under construction.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Bangladesh	Rural Electrification and Renewable Energy Development - SHS Project	Private (including NGOs)	Small, medium and Large	None	7,200,000	25,200,000	GPOBA, IDA, GTZ, KfW, ADB, IDB	SHS dealers receive three month supplier credit.
Bolivia	Bolivia Rural Electricity Access with Small-Scale Providers	Private	Competitive bidding is yet to commence.	Advance	5,175,000	8,425,000	GPOBA	Competitive bidding is yet to commence.
Bolivia	Decentralized Infrastructure for Rural Transformation	Private (including NGOs)	Not available	Advance	10,000,000	14,000,000	IDA	Not available
Cambodia	Cambodia Rural Electrification and Transmission	Private	Small	None	6,640,000	28,228,183	GEF, IDA	Not available
China	China - Renewable Energy Development	Private	Small and medium	None	15,000,000		GEF, IBRD	PV dealers/ SPs relied mainly on informal methods for financing investments and subsidies. Much of the financing was from internal sources. Loans, if any, were from parent companies, family friends and other informal arrangements. The absence of formal financing was an issue for some of the dealers, both for their own growth and to help them make additional sales. The project experienced delays due to lack of financing from FIs for PV dealers and slow payment of the PV grants, tied up to government reforms.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Ghana	Solar PV Systems to Increase Access to Electricity Services in Ghana	Private	Small	None	4,350,000	11,873,000	GPOBA, GEF, IDA	The dealers/SPs use their own funds to purchase the equipment upfront, marketing, and setting up service centers. According to a July 2010 BTO report submitted to GPOBA, the dealers were generally unprepared for the high levels of demand and could not finance their imports fast enough to keep up with their orders. This lack of trade finance threatens the growth of the market and the success of the project. The IDA credit does not refinance loans made to SHS dealers.
Indonesia	Indonesia - Home Solar Systems Project	Private	Small and medium	None	810,000	4,590,000	GEF, IBRD	BRI-SDF guarantee facility was set up to provide access to <i>consumer finance</i> to SHS customers. The SDF would guarantee up to 30% of the loans while the remaining 70% would be guaranteed by the dealers. The program had difficulty qualifying and attracting sufficient numbers of vendors with sufficient financial strength to participate effectively. Full recourse to vendors may not have been a reasonable and effective allocation of risk amongst the parties. Although it may have been necessary to induce banks to lend, it might have created barriers for vendors to participate.
Mali	Household Energy and Universal Access Project (HEUAP)				3,530,000	8,440,000	GEF, IDA	Not available
Nepal	Biogas Support Programme in Nepal	Private	Small and medium	None	5,000,000	14,776,001	GEF, IDA, KfW, GTZ	The dealer receives a significant upfront user payment, approx 70-80% (either from the user or from a micro loan) and this help with their cash flow and allows them to pre-finance the subsidies.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Nicaragua	Offgrid Rural Electrification (PERZA) - Mini grid	Private (including NGOs)		Intermediate	1,850,000	3,850,000	IDA	For the mini-grid developers, the subsidy disbursement triggers help with cash flow. 70-80% of the total subsidy is linked to verification of construction completion milestones and the remaining 20-30% are disbursed against yearly connection targets – balancing the incentive effect of a performance based subsidy with the financial strength of cooperatives and other small producers in local areas.
Philippines	Rural Power Project	Private (including NGOs)	Small and medium	None	1,650,000	16,450,000	IBRD	Dealers pre-financed the subsidy using internal cash/ working capital. A few SPs, particularly the smaller ones, could not scale up business volumes rapidly due difficulty in access to finance.
Philippines	SPUG	Private	Small or medium	None	2,300,000	12,000,000	IFC, GPOBA, DevCo	(Note: The total cost and subsidy are estimates for the first year of operation for the first pilot – this is an on-going subsidy.) The winning bidder for the first pilot was a consortium of local energy and transport companies. The generators clearly need large upfront financing, but it is not clear from where this financing came.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Sri Lanka	Energy Services Delivery Project	Private	Small, medium and Large	None	5,700,000	16,400,000	IDA, GEF	For both the SHSs and the Village Hydro-Systems, the SPs used a combination of Working Capital, Supplier Credit, and Loans from commercial banks (DSCC and Hatton National Bank). The IDA line of credit make funds available to banks and other FIs for refinancing of working capital to solar dealers as well as to qualified MFIs for HHs purchase of SHS. IDA funded the retailer (i.e., the solar company) to meet only the incremental permanent working capital. Each solar company received a maximum of one or two loans, as the amount financed had to be the incremental part of its permanent working capital requirements. Acc to TTL, the Refinance facility did help the SPs for the hydro-systems, but helped the SHS to a lesser degree since the SHS dealers were larger.
Sri Lanka	Renewable Energy for Rural Economic Development	Private	Small, medium and Large	None	3,900,000	33,300,000	IDA, GEF	Similar to ESD project.
Tanzania	Energy Development and Access project (TEDAP)	Private						Not available.
Uganda	Uganda Energy for Rural Transformation Phase I	Private	Small and medium		1,400,000		IDA, GEF	The project used an IDA line of credit make funds available to bank and other FIs for refinancing of working capital to solar dealers as well as to qualified MFIs for HHs purchase of SHS. Uptake of the loans is low, due to lack of sufficient collateral among the small scale solar companies. On the other hand, the larger companies are self financing and are not utilizing the loan product. Refinance for solar PV under ERT I included funds provided to three microfinance deposit-taking institutions (MDIs). Commercial Microfinance Limited (CML) had by 31st March 2009 provided working capital finance to three customers, all with repeat loans

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
								cumulatively amounting to UGX 285 million.
WATER AND SANITATION PROJECTS								
Bangladesh	Social Investment Program Project (SIPP)	Private	Medium or large	Advance and Intermediate	314,743	629,486	IDA	Sponsors could not find any lending support (interest rates were very high) from commercial Banks and hence had to invest from their own resources. Problems encountered by the Service Providers stemmed from a lack of pre-financing options - they encountered cash flow problems. The last two milestones (final output 15% and service delivery 10%) were unrealistic for the SPs: they could not foresee some of the issues such as price escalation, contractual management, required technical manpower; as a result there is a 20-25% cost over-run in completing the pilot
Brazil	Sao Paulo Water Recovery Project - REAGUA	Private			0	0		TA project; Large-scale service provider.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Cameroon	Cameroon Water Affermage contract - OBA for coverage expansion	Private	Large	None	5,000,000	11,750,000	GPOBA, IDA	Camwater, the public asset holding company, takes the prefinancing risk for new connections. The more typical OBA option was abandoned after consultation with potential bidders, which were reluctant to take additional financial risks in Cameroon. In the current market context, there was no appetite from potential bidders to take the pre-financing risk. The implementation of the project would be entirely delegated to the private operator, consortium led by ONEP, under the affermage contract.
Guinea	Second Water Supply Project	Mixed			16,900,000		IDA	This was a transition tariff OBA scheme.
Honduras	Extension of Water and Sanitation Services in Low income areas of Honduras	Government, Private - For Profit, Private - Not For Profit	Small and medium	Advance	4,000,000	27,750,000	GPOBA	The Honduran government (FHIS) is providing US\$1,000,000 to finance 'bridge loans' that meet pre-financing needs for public implementers. For those projects where financing has been provided by FHIS (mainly the municipal or small providers that would have difficulty tapping into commercial financing), the bridge loans will be repaid by using the OBA subsidy. For private implementers, financing can be arranged by tapping their own revenues or through local commercial banks. 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 a grant mechanism payable by the World Bank.
India	Improved Rural Community Water in Andhra Pradesh	Private - Not For Profit		Intermediate	800,000	1,300,000	GPOBA	The subsidy is paid to Naandi in installments after independent verification of three pre-agreed outputs which Naandi pre-finances through commercial borrowing. Naandi uses the GPOBA grant agreement and the operational guarantees provided by WHI as collateral. Naandi is also expected to take long term commercial loans for approx \$200K for this project. The commercial loan

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
								sourced by Naandi is payable over a period of approximately seven years.
Indonesia	Expansion of Water Services in Low income areas of Jakarta	Private - For Profit	Large		2,473,140	2,688,940	GPOBA	PALYJA, the service provider, is jointly owned by Suez (51%), PT Astratel Nusantara (30%) and Citigroup Financial Products Inc. (19%). PALYJA has the concession to serve the west zone of Jakarta.
Indonesia	GPOBA W3 - Expanding Piped Water Supply to Surabaya's Urban Poor	Government			2,192,500	4,652,500		Awaiting information.
Kenya	Microfinance for Community-managed Water Projects	Private - Not For Profit	Small	None	1,151,301	2,731,301	GPOBA, WSP, EU	Sources of finance for the project are 20% equity, 40% OBA subsidy, 40% long term debt. The infrastructure finance is provided on a project finance basis - projects financed with market based finance from domestic private microfinance institution (K-Rep Bank). US\$ 1.62 Million committed). K-Rep has purchased a partial credit guarantee from USAID's Development Credit Authority for 50 percent of the loan principal. The guarantee helps reduce the collateral requirements of potential borrowers.
Mexico	Guanajuato Water Project (Decentralized Infrastructure Reform and Development Loan)	Government			22,666,000	22,666,000	IBRD	Project involves output based disbursements (OBD) between the federal/Bank and state level.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Morocco	Improved Access to Water and Sanitation Services Project	Private - For Profit and Government	Large	None	7,000,000	22,200,000	GPOBA	The public utility of Meknès has taken on commercial debt to prefinance output delivery and allow households to pay their connection costs in installments. Amendis, the operator in Tangiers, and LYDEC, the operator in Casablanca, are international private concessionaires. For Lydec, the 'Fond de travaux', the investment fund of the delegating authority, is prefinancing the investments and the subsidy is reimbursed to the 'Fond de travaux', which happens to be managed by LYDEC. In the case of Amendeis-Tangier, Amendis is prefinancing the investments and is getting reimbursed by the 'Fond de travaux' in accordance with strict rules set forth in the contract.
Mozambique	Water Private Sector Contracts - OBA for coverage expansion in Mozambique	Private - For Profit	Large	None	6,000,000	6,131,150	GPOBA, EU, EIB, FMO, AFD, WaterAid, IDA	AdM, the service provider, is owned by Saur International 38.5% ; IPE-Aguas de Portugal 31.5%; Mazi Mozambique 30%. Despite the existing lease contract, AdM has agreed to pre-finance the connections and will receive the GPOBA subsidy on an output-basis.
Nigeria	Second National Urban Water Sector Reform Project	Private			13,350,000			Not available.
Paraguay	Fourth Rural Water Supply and Sanitation Project	Private	SME		834,880			In the first phase of the pilot all subsidy payments (apart from an advance) were withheld until the operator had demonstrated that it had successfully provided the connections, forcing the private sector to mobilize most of the construction financing. In the second phase shares of the total subsidy payment were released as the operator completes components of the system. This staggered release of payments would allow greater competition for contracts given the difficulties small construction companies face in mobilizing investment capital.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Philippines	Manila Water Supply	Private - For Profit	Large	None	2,800,000	18,188,600	GPOBA	Manila Water Company (MWC) is a Philippine company which provides water supply and sewerage and sanitation services to approximately five million people in the East Zone of Metro Manila, under the terms of a 25-year Concession Agreement started in 1997. MWC, is owned by Ayala Corporation (30.4), United Utilities (11.8%), Mitsubishi Corp (7.9%) and IFC (7.4%). The public owns about 37.9% of the company following the IPO.
Senegal	On-Site Sanitation Project	Government and Private - Not For Profit		Advance and Intermediate	5,503,000	7,214,000	GPOBA	Project recently has tie-up with PAMECAS, largest MFI in Senegal, to help users with their contributions for costly on-site facilities.
Senegal	Senegal - On-Site Sanitation Project (IDA Project)	Government and Private - Not For Profit		Advance and Intermediate	28,000,000	35,000,000	IDA	AGETIP, the for-profit NGO that acted as implementing agency, often was required to advance funds to artisans to make the scheme viable. Consumer affordability was not a major issue as the user contribution was limited and was prior to the financial/economic crisis.
Sri Lanka	Colombo Wastewater	Government	Large	None	1,100,000	6,530,000	GPOBA, SIDA	The project is still in design phase. However, the belief is that, National Water and Sanitation Drainage Board, the public sector service provider, will use internal cash to prefinance investments and subsidies.
Uganda	OBA in Kampala - Water Connections for the Poor	Government		None	2,280,700	4,000,000	GPOBA	Uganda NWSC, a public utility, uses working capital to pre-finance the output based subsidies. There are no loans taken specifically for the OBA scheme – not needed because work done in batches and small part of their overall capital program. Note that suppliers/creditors working alongside NWSC for OBA are quite satisfied because payments from GPOBA have been timely and the utility has "ring-fenced" the activities to ensure flow of funds from reimbursement channeled to new pro-poor connections.

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Uganda	OBA in Water Supply in Uganda's Small Towns and Rural Growth Centers	Private	Small and medium	Advance and Intermediate	2,440,000	4,468,189	GPOBA	<p>Access to finance, in particular to "pre-finance" investments until OBA subsidy disbursed is a challenge. Partly mitigates by -</p> <ul style="list-style-type: none"> - JVs with construction companies with more history of borrowing (although not for water system operations). - Phasing in of outputs in the greenfield cases were required (but still 40% paid on working connections and water delivered). <p>POs rely more on own cash, working capital (e.g. supplier credit) than bank loans. But now that the operators are starting to deliver results, some local banks are showing renewed interest in participating. Three of the operators - Trandint, JOWA and WSS - pre-financing has been obtained through bank loans, overdraft facilities, and borrowing from suppliers with whom the POs have a working relationship. JOWA got an overdraft facility from Stanbic Bank to finance general operational costs and for OBA pre-financing. Trandint got a loan from Barclays Bank for OBA pre-financing. The loan is repayable over 2 years at an interest rate of 27% p.a. The rest of the money used for OBA pre-financing was obtained from general savings. WSS did not get a bank loan for OBA pre-financing.</p>
Vietnam	Vietnam Rural Water (EMW)	Private - Not For Profit	Small and medium	None	2,850,000	3,810,000	GPOBA	<p>East meets West (EMW), a reputable international NGO, is the service provider in this project. EMW is pre-approved by a commercial bank and with the Rudolph Steiner Foundation. Loans will be backed up in part by EMWF's balance sheet In 2006, EMWF and in part by a collateral fund, set aside in an escrow account. EMW is in the position to pay interest payment due on the loans that will prefinance the outputs under GPOBA's project.</p> <p>In the second phase of the project, small local private providers are raising funds from commercial</p>

Country	Project	Type of Service Provider "SP"	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
								banks using their own collateral (e.g. homes, jewels, etc.)
Yemen	Yemen Water for Urban Centers	Private - For Profit	Small and medium	Intermediate	4,710,000	24,175,264	GPOBA	Too early – bidding preparation currently in progress.

Country	Project	Type of SP	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
HEALTH								
Afghanistan	Afghanistan - Health Sector Emergency Reconstruction and Development Project	Private		None	82,200,000	82,200,000	IDA	The project supports the implementation of the BPHS (basic package of health services) through Performance Partnership Agreements which are contracts that the MOPH signs NGOs There have been delays in payments to the NGOs, which will exacerbate the A2F problems.
Afghanistan	Afghanistan - Health System Emergency Reconstruction and Development - Supplement	Private		None	30,000,000	30,000,000	IDA	Not available.
Argentina	AR-Provincial Maternal-Child Health Invest. Loan - Phase I	Private for profit and public	Small	None	90,400,000	238,000,000	IBRD	The program is administered by provincial governments, which receive funding on the basis of the numbers of mothers and children enrolled and the performance on results-based "tracers"— sets of indicators measuring service delivery and quality. The services are provided by existing health care facilities, which receive a standard payment per patient and per service provided. 100% of subsidy will be disbursed to service providers after service delivery and verification. The treatments provided under this project rely on existing basic medical infrastructure and spare capacity of service providers.

Country	Project	Type of SP	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Argentina	Provincial Maternal-Child Health Invest. Loan (Phase II)	Private for profit and public	Small	None	277,400,000	554,800,000	IBRD	Not available.
Burundi	Health Sector Development Support				18,500,000			Not available.
Congo, Democratic Republic of	Health Zone Project: Health Zone Administration and Facilities Contracting Component	Private	small	None	5,000,000	5,000,000	IDA	The project has two performance-based components. 1) The Ministry of Finance pays the best-forming Implementing Agencies (NGOs) 2% of the “delegated amount” 2) The NGOs pay the health facilities on an output-basis based on various outputs, e.g. curative consultations, birth attendants, fees, etc. The SPs (health facilities) did encounter access to finance issues because of payment delays from the NGOs.
Congo, Democratic Republic of	DRC Health Centre Rehabilitation Support Project	Private	Small	None	5,000,000	5,000,000	IDA	Not available.
Kenya	Health Sector Support						IDA, KfW	Not available.

Country	Project	Type of SP	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Lesotho	Lesotho New Hospital PPP	Private	Large	None	6,155,000	Capital cost of \$100 million to build the hospital and \$22,000,000 (excluding VAT) annual unitary payment	GPOBA	This 18 year PPP project involves the design, construction, financing, and full operation of a state of the art hospital by a consortium led by Netcare, a South African health services company. The Netcare consortium is expected to finance 65% of the construction costs, estimated at USD 100 million, through commercial borrowing and equity. In March 2009, Development Bank of Southern Africa (DBSA) signed loan agreements of approximately R700 million (~ USD 90 million assuming 0.13 USD per R) with private operator.

Country	Project	Type of SP	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Nigeria	Pre-paid Health Scheme Pilot in Nigeria	Private	Small	None	6,100,000	9,869,164	GPOBA	Subsidize access to the health insurance service for up to 22,500 people over a four and a half year period. Packages will provide primary care, maternal care, and treatment for high-risk diseases through a Service Provider Network of small clinics and hospitals. Access to finance for private insurance entity, HHMO: according to the project team, marketing activities had to be pre-funded by the parent company of HHMO, Hygea as expenses became at some point a strain on the company's cash flow. Access to finance at the service provider level: HHMO will pay the 15 service providers in the network for primary care through capitation fees and for secondary and tertiary care through fee for service in the referral hospitals. 75% of the payments are fixed up-front monthly payments to cover primary care) and 25% are fee-for-service reimbursed on an invoice. The providers bear the risk of the cost of primary care delivery exceeding the capitation fee and HHMO bears the risk of high fee for service claims. There are no reports of cash flow problems in the service provider network so far. The time lag between enrollment and subsidy disbursement is between 30 and 45 days.
Philippines	Reproductive Health Services in the Philippines				4,000,000	4,700,000	GPOBA	Not available

Country	Project	Type of SP	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Rwanda	Poverty Reduction Support Credit 1	Government and NGOs	Mostly small	None	13,000,000	13,000,000	IDA	Health centers are reimbursed for services provided according to a standardized fee structure for 14 services, adjusted by a composite quality score. Service delivery will rely on existing facilities, which reduces the need for up-front investment from the health centers.
Rwanda	Poverty Reduction Support Credit 2 (Health component)	Government and NGOs	Mostly small	None	3,600,000	3,600,000	IDA	
Rwanda	Poverty Reduction Support Grant 3	Government and NGOs	Mostly small	None	8,250,000	8,250,000	IDA	
Rwanda	Poverty Reduction Support Grant 4	Government and NGOs	Mostly small	None	8,400,000	8,400,000	IDA	
Sierra Leone	Reproductive and Child Health Project - REA						IDA	The project is in design phase -- A2F information not available.
Sudan	Sudan Multi-donor Trust Fund for Decentralized Health System Development Project						IDA	Not available.

Country	Project	Type of SP	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Uganda	Reproductive Health Vouchers in Western Uganda	Private	small or medium	None	4,300,000	6,814,000	GPOBA, KfW	<p>Access to finance at the Voucher Management Agency level - Marie Stopes international, an internationally reputed NGO, and Microcare Ltd, a local microinsurance company, have partnered to form the VMA for this project. They lack the financial resources needed to completely pre-finance service delivery. In order to meet this obligation (up to US\$200,000 per month), KfW provides cash advances to the VMU. The VMU will obtain a performance bond to mitigate operational risks associated with these cash advances. This arrangement will address liquidity risks, while simultaneously leaving the VMU to bear operational risks.</p> <p>The medical service providers (MSP) in the project include private hospitals, clinics and nursing homes. The cost of treatment will be borne up-front by the MSPs. 100% of subsidy will be disbursed to service providers after service delivery and verification.</p> <p>Access to finance at the MSP level – Service delivery will rely on existing facilities, which reduces the need for up-front investment from small-scale service providers.</p> <p>Experience in Uganda has shown that individual service provider use proceeds from voucher treatments to expand facilities over time. Swift disbursement from the VMA to MSPs is critical to mitigate issues of access to finance for the MSP. The advance payment from KfW to VMA helps with timely disbursement to MSPs. During the mid-term review in Feb 2010; it was found that on average it takes 18 days to process claims, which is within the agreed target of 30 days.</p>

Country	Project	Type of SP	Size of the service provider	Phasing Subsidy?	Total subsidy	Total cost	Donor Involvement	A2F
Vietnam	Health Support to the Poor of the Northern Upland (REA)				14,140,000	14,140,000	IDA	Not available.
Yemen	Yemen Safe Motherhood Program	Private	Large		5,403,960	7,077,200	GPOBA	Both the private hospitals providing maternal health services under this project are large service providers and are prior IFC Clients. The project requires upfront capital investment of approx \$280,000 for setting up the satellite clinics from the service providers – this accounts of 50% of the total capital costs, the other 50% is funded by GPOBA on an output basis. According to the TTL, both service providers are not willing to invest any additional capital in the project as they are trying to conserve cash especially in the aftermath of the global financial crisis. The service providers are using internal cash to “prefinance” the services and as a result are facing some cash flow problems. The project is also experiencing significant delays related to SP delays in submitting invoices and also to some extent in relation to the independent verification process.
Yemen Arab Republic	Healthy Motherhood JSDF	Private			1,980,000	1,980,000	IDA	Project in design phase.

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