Supporting the delivery of basic services in developing countries
**Notes on figures and tables**

The data in the tables and figures are as of June 30, 2007.

The regional classifications are those of the World Bank, denoted by the following abbreviations:

- **AFR**  Sub-Saharan Africa
- **EAP**  East Asia and Pacific
- **ECA**  Europe and Central Asia
- **LAC**  Latin America and the Caribbean
- **MENA**  Middle East and North Africa
- **SAR**  South Asia
One in five people lives on less than $1 a day. In the countries where most of these poor people live, the provision of infrastructure is both low and unequal. As a result, more than 1 billion people in the world lack access to safe drinking water, and 2.4 billion lack adequate sanitation. The situation in other infrastructure sectors as well as in social services is similar with a huge access gap excluding the poor from service.

Hence, there is a great need to increase investment, but there is also a great need to improve its effectiveness. Spending by governments and donor agencies needs to be well targeted and transparent, so that development assistance can most effectively achieve the desired outcomes of improved access to basic services and, ultimately, lower poverty. Output-based aid (OBA) can help increase aid efficiency by improving targeting of funds and increasing the efficiency of service delivery.

How output-based aid works
Output-based aid is one method for improving the delivery of basic infrastructure and social services where policy concerns—such as lack of ability to pay or the presence of externalities that benefit society as a whole (clean air, reduced disease)—justify the use of explicit, performance-based subsidies. At the core of the OBA approach is that service providers are for the most part paid after delivery of the agreed output. The disbursement of the subsidy is therefore linked to the delivery of a specified output (figure 1).

Three main applications
The three main applications of OBA identified to date are one-off subsidies, transitional subsidies, and ongoing subsidies.

- **One-off subsidies**, the most common application of OBA, usually involve capital subsidies aimed at increasing access to services. A large portion of the subsidy is usually paid after the targeted beneficiaries are connected to a network and connections are verified. To increase sustainability a smaller portion of the subsidy may possibly be withheld until after verification of a period of service delivery.

- **Transitional subsidies** help fill the gap between what the user is deemed able or willing to pay and the cost-recovery level of the tariff. The subsidy may be disbursed against bill collection and is phased out after a given number of years as the user contribution increases.

- **Ongoing subsidies** are required where there is a perpetual gap between affordability and cost recovery, including consumption costs. Social (or lifeline) tariffs targeting low-income groups are an example. As with transitional subsidies, ongoing subsidies are paid against services delivered. Here, a clearly earmarked source of future funding is required, and sustainability may therefore be an issue.

Advantages of OBA
OBA enhances transparency through the explicit use of subsidies that allow better targeting (box 1). Transparency is achieved by tying the delivery of...
subsidies to a specified output and defining who provides the subsidy, who receives the subsidy, what is being subsidized, and for how much.

OBA increases accountability by shifting performance risk to the service provider (box 2). This is done by paying the service provider mostly after the delivery of the agreed output. Through competition or benchmarking, output-based approaches provide stronger incentives for innovation and efficiency and leave service providers the flexibility to decide how to provide services. The use of performance-based subsidies facilitates the engagement of private sector capital and expertise by encouraging the private sector to serve customers (usually the poor) whom it might otherwise disregard. OBA provides an opportunity to leverage private finance and expertise for nonsubsidized customers as well.

Through careful project design, output-based subsidies can contribute to the sustainability of projects. The question of how to finance ongoing service provision is part of a project’s design. In most cases well-targeted one-off or transitional subsidies can achieve sustainable financing of service provision. Moreover, well-designed OBA projects will ensure that tariffs cover at least operating and maintenance costs while other contractual mechanisms ensure that quality standards are met.

Because payments are made against agreed outputs, and because outputs are defined as close to the desired outcomes (or results) as is feasible, OBA largely internalizes the monitoring of results.

Where is OBA in use?
The idea of OBA is not entirely new. Several countries have employed schemes that tie public expenditures to the delivery of prefinanced outputs. One of the earliest known schemes was in the Republic of Korea, a reproductive health services contracting scheme that started in the 1960s. Many road and information and communications technology (ICT) schemes in both developed and developing countries have involved output-based approaches as have voucher schemes in health and education.
There are also examples in water and energy. In Chile, for example, the urban water sector has implemented an output-based approach in an ongoing subsidy scheme for low-income households in the early 1990s. And two OBA initiatives have been identified in Brazil. One, an electricity program targeting poor families, connected more than 1.4 million people to the grid in 2004.

In an on-going research effort within the World Bank—including GPOBA—about 100 OBA projects have been identified in the infrastructure and social services sectors, for a total OBA portfolio of about US$2.4 billion. These OBA projects are at different stages—with most under design or in implementation.

Most World Bank OBA projects are in the water or telecommunications sector, with energy in third place (figure 2). By funding volume, however, projects in the water sector are very small, while those in the transport and social sectors tend to be larger. By region, the vast majority of the OBA projects are in Sub-Saharan Africa and Latin America (figure 3). Projects in Sub-Saharan Africa generally are smaller by funding volume than those in Latin America.

Of the World Bank OBA projects identified, more than half are in IDA countries—those eligible for funds from the International Development Association. But most of the funding for OBA

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**Box 2. Shifting performance risk through payments upon outputs**

The degree of performance risk that is shifted to the service provider in OBA projects depends on the local and sector context and is related to the issue of access to finance (see box 3). The greater the access to finance and the greater the risk the operator can bear, the greater the performance risk shifted to that provider through OBA—and the more “output based” the project. In a Senegal rural electrification project 30 percent of the payments are withheld until after the delivery of viable working connections and proven service delivery. This was determined to be the most performance risk the market could bear—although the project also ensures sustainability through a 25-year concession contract under which the private investor recoups its total investment only after the full 25 years.

In Paraguay’s rural water sector original OBA subprojects involved disbursement of subsidies only after delivery of working connections. This inhibited the involvement of many local operators, however, so disbursement was relaxed to allow some payments up front. But more risk was transferred in a maternal and child health project in Argentina: 40 percent of the subsidies are disbursed based on the enrollment of qualified patients, and 60 percent after service delivery. In the Colombia natural gas connection project, the operator is able to bear the risk, and be paid 100% of the subsidy, after the connection has been made and has been verified as working properly for a certain number of months.
projects so far has been in IBRD countries—those that borrow from the International Bank for Reconstruction and Development. One explanation for this might be that IBRD countries have more sophisticated regulatory environments that help to reduce risks for service providers. In IDA countries, by contrast, it tends to be more difficult to find private sector providers willing to bear investment risks, or high-quality public utilities to implement OBA projects.

The median project size so far is only about US$6 million—as OBA has been mainly in the pilot stage—although some transport and social services projects in IBRD countries have been very large. The total identified population reached through all projects is expected to exceed 54 million, with an estimated subsidy per person of about US$49 (not including road and telecommunications projects). Including telecommunications projects, many of which include a public access component reaching many people for each phone installed, the average subsidy per capita is about US$21.

In addition to the World Bank, the following donors and international institutions are actively supporting OBA approaches: the Agence Française de Développement (AFD), Australian Agency for International Development (AusAID), U.K. Department for International Development (DFID), Dutch Ministry of Foreign Affairs (DGIS), International Finance Corporation (IFC), KfW Entwicklungsbank, U.S. Agency for International Development (USAID), the Swiss State Secretariat for Economic Affairs (SECO) and Swedish International Development Cooperation Authority (Sida).

What is the role of GPOBA?
The Global Partnership on Output-Based Aid (GPOBA) was established in January 2003 by DFID and the World Bank. Its purpose is to fund, demonstrate, and document OBA approaches to support the delivery of basic services to those least able to afford them and to those without access to such services.

GPOBA’s focus sectors are:

- Water
- Energy
- Transport
- Education
- Sanitation
- Telecommunications
- Health

The primary outputs of GPOBA are pilot OBA projects and related activities to identify and disseminate lessons of experience in the design and implementation of OBA schemes.

Support from donors
GPOBA’s initial donor, DFID, approved US$12 million in 2003 for the design of OBA projects and dissemination of results. DFID contributed an additional US$35 million in March 2005, dedicated mainly to grant financing.
of OBA subsidies to increase the number of infrastructure projects during fiscal 2006–08. Since June 2006 GPOBA has seen donor membership increase, with the following current contributions from donors other than DFID:

- AusAID, US$250,000
- IFC, US$35 million
- DGIS, US$28.3 million
- Sida, pledge of US$6 million

Additional contributions are expected from IFC, DGIS and AusAID during 2007. And GPOBA is actively seeking additional support from other donors.

**Early activities**

From its inception in January 2003 until the end of 2004, GPOBA concentrated on providing technical assistance for projects of the World Bank and other donors and on disseminating the concept of OBA. In total GPOBA provided a total of US$3.8 million for 24 projects, most of which are already closed or in the final stages of completion.

Technical assistance has included help in capacity building for local stakeholders, development of fund flow mechanisms, and studies of willingness and ability to pay as well as other economic and financial analyses to determine appropriate subsidy levels. For the Philippines’ electricity sector, for example, GPOBA helped support the development of a regulatory and institutional framework that would enable a more effective OBA regime. It also supported the design of the OBA transitional subsidy mechanism. For Kenya’s water sector, GPOBA provided support to help design the OBA scheme and develop the capacity of local community organizations that would build and operate the OBA-funded water supply systems.

Dissemination activities have included analytical papers on OBA and related topics, OBA case studies, participation in workshops and conferences, and development of monitoring and tracking systems for OBA projects.
For example, GPOBA has participated in two “road shows” in Sub-Saharan Africa, in partnership with the Water and Sanitation Program and the Public-Private Infrastructure Advisory Facility, both to disseminate information on OBA and to develop projects. GPOBA has also published more than 15 OBA Approaches—four-page briefs on OBA cases or related topics that are disseminated through GPOBA’s website and quarterly newsletter and in hard copy.

**Providing subsidy funding**

Once GPOBA had the ability to subsidize project outputs, it has been concentrating on projects that involve subsidy funding. At the end of fiscal 2007 there were 38 projects involving GPOBA subsidies in the project portfolio, at different stages of the approval and implementation process (table 1). The first GPOBA grant agreement was signed on April 28, 2006. By June 30, 2007, GPOBA had signed nine grant agreements for a total subsidy amount of US$30.2 million, directly benefiting nearly 800,000 people (table 2). A tenth grant agreement was signed in the first weeks of fiscal 2008, raising the total to US$36.0 million.

By the end of fiscal 2007 GPOBA’s independent Panel of Experts had endorsed commitment for 15 additional projects with a total subsidy amount of US$66.5 million. In addition, 14 (with a total subsidy amount of US$46.2 million) are in the eligibility stage, 8 of which have been awarded technical assistance funding.

The average subsidy for the projects in the pipeline is US$3.8 million. The average subsidy per beneficiary for all GPOBA projects is US$ 26.38 (table 3). Experience has shown that subsidy requirements tend to vary among sectors. Projects in health and energy tend to require larger subsidies per person. Subsidies needed are usually higher if the target population lives in dispersed rural settlements. The smallest subsidies per beneficiary occur in the telecommunications sector, where public pay phones can provide access to a large number of people. The subsidy per capita for health projects can vary significantly depending on the location of the project, the nature of the service providers, and the interventions covered. Within the water sector subsidies vary according to the scope of service provision with public access points or yard taps requiring the least subsidy and household connections to water and sanitation requiring higher subsidies.

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<th>Table 1. GPOBA portfolio by Funding Windows</th>
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<td>Technical Assistance</td>
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<th>Table 2. GPOBA portfolio of projects involving subsidy funding</th>
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<td>Portfolio status</td>
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<td>Grant Agreement</td>
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<td>Grand Total</td>
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<th>Table 3. Average GPOBA subsidy per beneficiary by sector</th>
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<td>Energy</td>
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<td>Telecoms*</td>
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<td>Total*</td>
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* Excludes one public access telecommunications project that reaches a particularly large number of beneficiaries.
Targeting the poorest regions

Sub-Saharan Africa accounts for the largest share of both GPOBA projects and total subsidy amount, followed by East Asia and Latin America (figure 4). Projects in the Middle East and North Africa, Sub-Saharan Africa, and Latin America tend to involve slightly larger subsidy amounts than those in Central, East and South Asia. This result might be explained to some extent by the fact that the earlier GPOBA projects, involving relatively small subsidies, are located in the Central, East and South Asia. GPOBA has received more applications, generally for larger subsidy amounts, from Sub-Saharan and North Africa recently.

The distribution of GPOBA subsidy funding by sector differs from that of the overall World Bank portfolio of OBA projects (figure 5). The funding share of water projects in the GPOBA portfolio is nearly six times that in the Bank OBA portfolio. Among all World Bank OBA projects, transport projects account for more than half of the funding volume, and social services projects—most of them in health—for more than 20 percent. Given the success in mainstreaming performance-based road management schemes, GPOBA has not provided subsidy funding for road projects. Health projects—as of now the only GPOBA projects in social services—account for 15 percent of the GPOBA portfolio.

While most of the World Bank’s OBA projects are in middle-income countries, and its OBA funding is clearly concentrated in Latin America, GPOBA has a specific mission to test OBA approaches in more difficult environments in poorer countries. About 84 percent of GPOBA’s projects involving subsidies are therefore located in IDA and IDA-blend countries, accounting for 83 percent of GPOBA’s projected subsidy volume (figure 6).
Among World Bank OBA projects without GPOBA subsidy involvement, those in IBRD countries are on average substantially larger than those in IDA countries. By contrast, GPOBA projects in IDA and IBRD countries are approximately the same size.

Lessons and challenges
GPOBA projects are still in the pilot phase, so learning and evidence gathering are still in progress. So far, however, the OBA approaches have in most cases delivered the expected results. The experience with OBA projects, both those involving GPOBA subsidies and others, points to some lessons as well as some challenges.

- OBA schemes need to be designed and applied flexibly, depending on country circumstances. Accordingly, OBA should evolve and adapt to sector and local conditions.
- OBA was introduced with the recognition that full cost-recovery tariffs are not always feasible. Yet OBA is no substitute for sector reform; sustainable tariff policies are essential.
- The success of many OBA schemes depends on the existence and interest of competent local private operators and investors. But local companies have often needed substantial capacity building to improve their understanding of OBA and their ability to work under World Bank-approved procurement procedures.
- Moreover, the ability of local operators and investors to participate in OBA schemes depends on their access to finance. While in many cases it seems desirable to work with small local service providers, such providers frequently face constraints obtaining finance to participate in OBA projects (box 3).
- That very few OBA projects involve public sector service providers demonstrates the challenges in providing the right incentives in such cases. GPOBA is piloting several projects with public service providers.
- The recent move to projects using output-based disbursements from federal to local governments is encouraging for OBA applications involving the public sector. These projects involve donor loans to federal governments, which in turn disburse funds to regional or provincial governments against the delivery of clearly specified outputs. A health program in Argentina, for example, involves such outputs as vaccinations, maternity checkups, and well-child visits, with disbursements to provincial governments based on the achievement of results.

- The capacity of local implementing agencies to provide the independent verification of outputs that

Box 3. Addressing constraints in access to finance

OBA projects have relied increasingly on small and local providers to deliver services to the poor. But obtaining affordable finance to "prefinance" investments until outputs are achieved and OBA subsidies disbursed is a real challenge for these providers. As a result, the requirement that OBA payments be made only upon delivery of outputs has been relaxed to some extent (see box 2). But more innovative solutions are being sought. A water project in Kenya, for example, involves a partnership with a microfinance institution, K-Rep Bank, working with community-based providers. The GPOBA subsidy provides additional comfort through the assurance that if outputs are delivered as agreed, donor-funded subsidy payments will be disbursed. Another water project, in Uganda, has utilized IFC support for capacity building of local private operators by providing workshops and training. The project is also working with the nonprofit Acumen Fund to provide credit enhancements through local banks.
is required in OBA schemes might be a concern. Nevertheless it is expected that OBA may help reduce corruption because of the transparent use of funds—by making it clear how much subsidy is paid for a specified output and largely paid after output delivery.

**Looking to the future**

*More time and larger OBA projects are needed to draw definitive lessons.* That includes more pilots with incumbent service providers (whether public or private), where it is not possible to undertake a competitive selection process to determine the most efficient service provider and lowest cost. Instead, benchmarking or standard unit prices are required.

*New solutions are needed to improve access to finance for local operators.* The requirement that OBA disbursements be paid only upon delivery of outputs has in some cases been relaxed to a certain extent to address this issue. This has been done by staggering or phasing disbursement of subsidies before the delivery of outputs while still maintaining incentives to deliver services. However, more innovative solutions need to be found. For example, bilateral development banks and international financial institutions could help improve access to finance for service providers participating in OBA projects.

*There is growing evidence that OBA enhances aid effectiveness.* What is clear from lessons learned over the past several decades is that aid needs to focus on delivering and measuring results. Those results can be more pro-poor if interventions are explicitly targeted to be so. OBA is a clear step in that direction. The focus for GPOBA going forward will be on implementing and monitoring OBA pilot projects and selectively scaling up so that further lessons can be learned and challenges addressed.
Center of OBA Expertise

One of GPOBA’s goals is to function as a center of OBA expertise. This includes disseminating knowledge and experience on OBA and related topics to governments, multilateral and bilateral donor agencies, service providers, consumers, NGOs, academic institutions, and consultants. For information on how to design an OBA scheme, or to read more about OBA, including case studies and lessons learned, please visit our website at www.gpoba.org.

GPOBA also functions as a repository of information on OBA approaches undertaken throughout the world. If you have information on an OBA scheme that you think should be highlighted in a case study or included in our OBA database, please email us at gpoba@worldbank.org.

Contacting the Global Partnership on Output-Based Aid

For more information on GPOBA, or to download an application form for GPOBA funds, visit GPOBA’s website at www.gpoba.org.

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