

# Output-Based Aid and Sustainable Sanitation

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## INTRODUCTION

Sanitation (i.e., the safe and sustainable management of human waste) is highly beneficial to communities as a whole with important public benefits in terms of health and the environment. Public financing is an important way to stimulate the provision of sanitation services to a level that can benefit society, but there are serious issues with the way public subsidies for sanitation have been delivered up to now. It seems increasingly unlikely that the MDG target for sanitation will be met in many countries unless better ways of structuring public finance can be found.

## PROBLEM STATEMENT

The sanitation sector appears to be “lagging” for a number of reasons, including the taboo element attached to sanitation, low levels of awareness, lack of political will and attention, institutional fragmentation, and insufficient or inadequately targeted financing. Conventional financial tools for sanitation, such as household subsidies for toilets, infrastructure subsidies for new wastewater treatment capacity or operational subsidies for water and sewerage authorities have shown limited effectiveness and ability

to reach the poor. They often do not respond to demand and there is ample evidence of “wasted” hardware subsidies which result in inefficient investments.

In recent years, results-based financing (of which output-based aid is a subset) has emerged as an important new way of financing public services in general and basic services in particular (especially in telecommunications, energy, and health). Application of these approaches has so far remained limited in the sanitation sector. For example, according to a recent review led by the Global Partnership on Output-Based Aid (GPOBA), water and sanitation accounted for only 5 percent of the total OBA portfolio for the World Bank Group as of 2009.<sup>1</sup> The water and sanitation sector accounted for 26 percent of GPOBA's portfolio, the largest share attributable to a single sector. However, although GPOBA has initiated a number of sanitation projects, only two are currently under implementation, including a project financing onsite sanitation facilities in Dakar (Senegal) and another financing connections to water and sanitation in Morocco (see Box 1).

A few national governments have adopted output-based approaches to delivering subsidies for sanitation. Examples of such programs include the PLM (Programa de Letrinas Melhoradas) which started in Mozambique in the late 1980s and supported the development of a network of latrine-building workshops throughout the country's main cities via subsidies based on latrine sales. In India, the Total Sanitation Campaign



## Key findings

- 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.
- Even though OBA has gradually emerged as an important way to finance access to basic services, experience with OBA-type financing approaches in the sanitation sector has remained limited and there have been mixed results.
- However, evidence from existing projects suggests that OBA could improve the targeting and efficiency of subsidy delivery, and help to develop and strengthen sanitation providers.
- OBA subsidies could be packaged to support services along the “sanitation value chain,” from demand promotion to collection/access, transport, treatment, and disposal/re-use.
- OBA for sanitation is no panacea, however, as developing such schemes can be challenging. Moreover, the introduction of OBA financing approaches needs to go hand-in-hand with much needed broader reforms in the sanitation sector.

<sup>1</sup> Mumssen, Y., L. Johannes and G. Kumar. 2010. *Output-Based Aid: Lessons Learned and Best Practices*. Washington, DC: World Bank. Available at: <http://www.gpoba.org/gpoba/ebook>

### BOX 1: OBA FOR CONNECTIONS TO WATER AND SEWERAGE IN UNPLANNED URBAN SETTLEMENTS IN MOROCCO

In Morocco, GPOBA provided a US\$7 million grant to three service providers (both public and private) to extend water and sewerage services into unplanned urban settlements which were formerly excluded from regular service provision. Launched in 2007, the project aims to connect 11,300 households to piped water and sewerage. The output is a simultaneous connection to piped water and sewerage for poor households. The subsidy is paid in two installments: 60 percent on completion of the connection and 40 percent upon verification of at least 6 months of sustained service. Verification is carried out by an independent third party. Details of the schemes and the costs of the subsidy vary by operator. Unit subsidies for sewerage connections vary from US\$421 in Casa-blanca to US\$913 in Meknès, due to differing unit costs and differing ability to pay on the part of households in different cities. Initial progress under the scheme was slow, largely due to a lack of familiarity with this type of scheme, investment delays upstream and lack of clarity over land tenure. The pace of investment has substantially picked up in subsequent years, with Amendis in Tangiers having delivered the expected number of connections ahead of schedule. The Government of Morocco is now exploring options for scaling up the scheme at national level.

Source: Based on Chauvot de Beauchêne, X., 2009, "OBA in Morocco (Part 1): Extending Service to the Poor in Urban Areas," OBAApproaches 25, and personal communication with X. Chauvot de Beauchêne.

(TSC) introduced incentive-based subsidies to poor households who build their own latrines and rewards to communities for convincing their members to stop open defecation, referred to as the NGP (Nirmal Gram Puraskar) awards.<sup>2</sup>

### ACTION

GPOBA, in association with the Water and Sanitation Program (WSP), initiated a study to examine whether OBA has the potential to improve the delivery of public financing to the sanitation sector and improve access to sustainable sanitation services. The first phase of the study consisted of reviewing experience to date with OBA for sanitation and examining the potential for its application. Phase 1 led to the publication of a GPOBA Working Paper.<sup>3</sup> During Phase 2, concept notes are being prepared to identify how OBA approaches could be introduced in a number of sanitation projects or programs that are either ongoing or in the process of being designed.

Key questions raised in the study included:

- What explains such limited use of OBA-financing approaches for sanitation?
- How can OBA subsidies be delivered to providers of sanitation services?
- What other components (e.g., support services to small-scale independent providers, micro-finance, etc.) may be required to improve chances of success of OBA schemes for sanitation?

<sup>2</sup> Trémolet, S., with P. Kolsky and E. Perez. 2010. "Financing On-Site Sanitation for the Poor: A Six Country Comparative Review and Analysis." Technical Paper. Water and Sanitation Program, Washington, DC.

<sup>3</sup> Trémolet, S., and B. Evans, with inputs from D. Schaub-Jones. 2010. "Output-Based Aid for Sustainable Sanitation." OBA Working Paper 10. Global Partnership on Output-Based Aid, Washington, DC. [http://www.wsp.org/wsp/sites/wsp.org/files/publications/OBA\\_Sanitation\\_Framework.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/OBA_Sanitation_Framework.pdf)

### KEY LESSONS

The basic approach for the study consisted of analysing the range of sanitation services that need to be provided along the "sanitation value chain" in order for those services to be provided sustainably, ranging from demand promotion, collection/access, transport, and treatment to safe disposal and/or re-use.

**Demand promotion is particularly important for sanitation, which is why it can be considered as the first step in the chain of sanitation services.** Approaches that emphasize demand creation and let households carry out infrastructure investments (such as the Community-Led Total Sanitation approach) have proven to be particularly effective in leveraging private household financing and require public funds to be allocated to "software" for these services to be scaled-up. Table 1 presents examples of sanitation services that could be supported via OBA subsidies.

**The main focus of any intervention will be determined by identifying which funding gaps need to be filled, i.e., where market failures or affordability constraints mean that a sanitation service is being under-provided.** For example, if networked sewerage exists but people are not connected, the principle focus for subsidies (either OBA subsidies or not) will be on collection/access (building sewerage connections). If households have on-site sanitation facilities (such as basic latrines) but the pit waste is being indiscriminately dumped in the environment, the focus may be on fostering transport and safe disposal of this waste.

**The design of individual OBA schemes will depend on the most appropriate way to package the provision of sustainable sanitation services.** This means that each OBA scheme is likely to include a combination of several types of results-based subsidies. Some indicative options for packaging OBA support are shown in Figure 1, with examples of existing or potential programs cited.

**Table 1: Examples of Output Indicators to Trigger Payment for OBA Subsidies**

Value Chain	Services	Output Indicators
Demand promotion	Sanitation marketing	Number of households who build/rehabilitate a latrine following demand promotion
	Social mobilisation, triggering	Number of villages/communities becoming Open-Defecation Free (ODF)
Collection/access	Build on-site sanitation facilities	Number of facilities built and still operating x-months down the line
	Build and operate community or public toilets	Number of toilet blocks in disadvantaged areas (used/paid for)
Transport	Transport pit waste to designated points	Volume of waste transported to and disposed in designated locations
	Build and operate waste transfer stations	Number of waste transfer stations built and functioning x-years down the line
Treatment	Build, maintain and operate wastewater treatment plants	Volume of waste collected and treated to required standard
Disposal/re-use	Build and maintain facilities which convert waste to agricultural inputs or biogas	Volume of productive agricultural input generated and sold to farmers or gas created (and sold)

The further down the chain the subsidy is provided, the more likely it will be possible to implicitly subsidize previous steps of the chain. For example, in Sri Lanka, GPOBA proposes to create incentives for better operation of on-site sanitation by combining a payment for operation of on-site systems with a subsidy for rehabilitation and construction of new facilities. This will create incentives for contractors to enter the market as “sanitation operators” in charge not only of building latrines but also of ensuring that they are adequately maintained and remain operational over time. In the PRODES (Programa Despoluição de Bacias Hidrográficas) program in Brazil, the utilities get a subsidy if wastewater gets treated; the subsidy thus also gives them incentives to connect new customers to the network, as this would increase the overall amount of wastewater that arrives in the treatment plant.

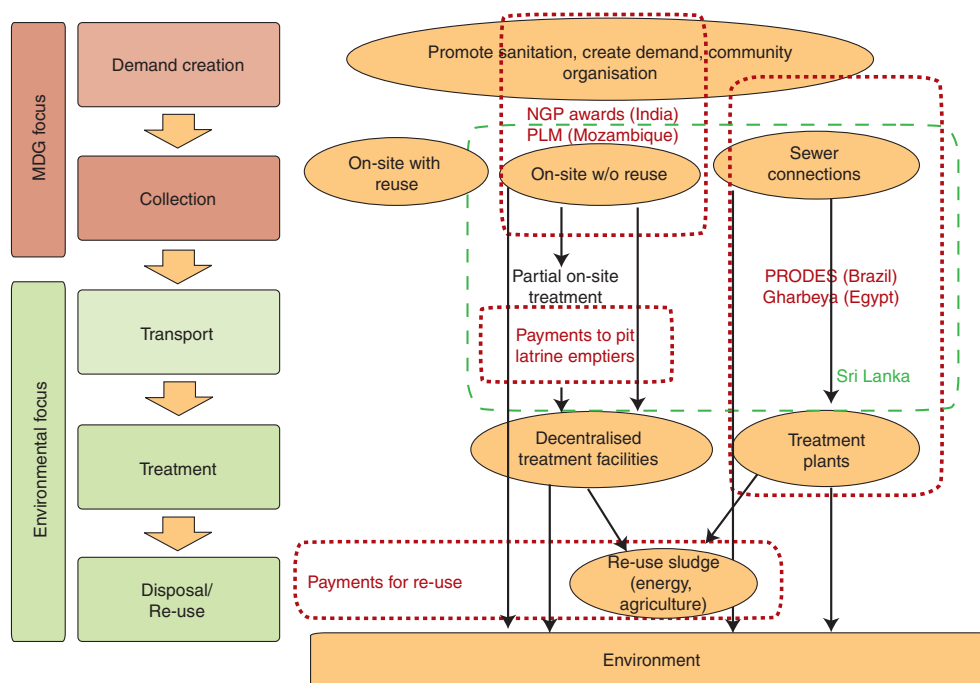
**KEY CHALLENGES**

A number of challenges have limited the use of OBA for sanitation so far. However, evidence from existing projects suggests that these constraints can be alleviated through careful project design.

**First, households tend to be unaware of the benefits from sanitation.** This means that willingness-to-pay for sanitation services tends to be low and demand can be unpredictable. These obstacles can be partially addressed by conducting thorough demand assessment studies as part of the design of the scheme, coupled with demand promotion activities.

**Second, a common challenge is that sanitation service providers may be unable to mobilise pre-financing (a common precondition for OBA) to invest in the services prior**

**Figure 1: Potential packaging of OBA financing across the sanitation value chain**



**to receiving the subsidies upon delivery of pre-identified outputs.** This challenge can be addressed in a number of ways, either by combining OBA schemes with micro lending (as was done by K-Rep Bank in Kenya to support rural water schemes) or by splitting the service providers' remuneration between an upfront payment ("block grant") and a performance-based payment. Packaging services to the poor with other revenue-generating services, such as solid waste, may also be a way to generate cash-flow for the service providers to enable them to pre-finance the investments.

**Finally, pilot OBA schemes will almost by definition remain limited in scope unless a financing mechanism is elaborated that will provide regular and transparent subsidy flows to sanitation service providers throughout a given country.** This can take the form of a "challenge fund," as currently tested in Honduras with the establishment of a Honduras OBA facility housed within the Honduran Fund for Social Investment (FHIS).<sup>4</sup> The Facility will provide a total of US\$4 million in subsidies for the financing of eligible water and sanitation infrastructure projects, selected based on rigorous identification criteria. Pre-financing will also be made available through the Facility for those project implementers that need it, although the payment of the subsidy will remain linked to the output. Although the

approach is showing promise, it is too early to evaluate whether such "mainstreaming" of OBA approaches, particularly in the sanitation sector, can be successful or not.

### WHAT ELSE DO WE NEED TO KNOW?

From existing experiences in sanitation and results achieved in other sectors, it appears that OBA has the potential to:

- Help extend access to sanitation in a sustainable and more efficient manner;
- Help target subsidies for sustainable sanitation to disadvantaged households and deliver trackable results from subsidies invested in the sector, ensuring minimum leakage (as long as the subsidy source is clearly identified and secured); and
- Support the development and strengthening of sanitation service providers, while giving them incentives to serve areas of greatest need, including rural and peri-urban areas and urban slums via a range of services, such as well-run public toilet blocks or pit-latrines emptying.

Although introducing OBA schemes for sanitation will only be one part of a larger set of necessary high-level sanitation sector reforms needed to improve and scale-up access to sanitation services for the poor, their introduction could go some way towards improving access through greater targeting and better incentives for service provision.

—By Sophie Trémolet and Barbara Evans

<sup>4</sup> Mandri-Perrott, C., Schiffler, M. and Aguilera, A. 2009. "Output-Based Aid in Honduras: An OBA Facility for the Water and Sanitation Sector." OBA Approaches 29.

The Water and Sanitation Program (WSP) is a multi-donor partnership created in 1978 and administered by the World Bank to support poor people in obtaining affordable, safe, and sustainable access to water and sanitation services. WSP's donors include Australia, Austria, Canada, Denmark, Finland, France, the Bill & Melinda Gates Foundation, Ireland, Luxembourg, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States, and the World Bank.

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## Related Reading

The complete report is available at [http://www.wsp.org/wsp/sites/wsp.org/files/publications/OBA\\_Sanitation\\_Framework.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/OBA_Sanitation_Framework.pdf)

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