This Guidance Note is a product of the Sustainable Development Network and is aimed at helping World Bank Task Team Leaders and other Bank specialists in the design and implementation of infrastructure investments, developed as part of the Infrastructure Recovery and Assets (INFRA) Platform. The INFRA Platform has been developed to bridge infrastructure financing, project preparation, and capacity gaps resulting from the global financial crisis. The Platform comprises a rapid diagnostic tool to identify at-risk infrastructure projects, a concessional financing window to support the preparation and financing of projects, initiatives for parallel and donor financing, and a common reporting system. More information at www.worldbank.org/infra

Abstract

The upgrading of slums using results based financing instruments can be an effective tool in response to the financial crisis by creating jobs, encouraging reform of inefficient public utilities and at the same time improving access to basic services by the urban poor. Given the scarcity of public funds, it makes good sense to use results-based financing for more efficient allocation and target oriented use of public resources.

This note provides guidance to World Bank Task Team Leaders and other Bank specialists in the design and implementation of slum upgrading projects. The note mainly focuses on Output-Based Aid (OBA) or performance-based grants, which is one form of results-based financing, where the result is improved access to basic services such as electricity or water and sanitation. In addition, the note discusses the use of other results-based financing instruments which focus on improved efficiency of assets of utilities providing such basic services.

Introduction

This note is aimed at providing guidance to World Bank Task Team Leaders and other Bank specialists in the design and implementation of slum upgrading projects using results-based financing such as output-based aid (OBA) under the INFRA platform as a means of addressing the impacts of the global financial crisis. We will also briefly discuss how other results-based financing techniques could be used to encourage utilities to become more efficient and effective. The purpose of the tools discussed within this note is to improve overall performance efficiency of service providers through targeted activities that can bring about ‘quick wins’ that encourage efficiency in operations as well as improved access for the urban poor.

Why focus on the urban poor?

The impacts of the global financial crisis are anticipated to hit urban areas particularly hard given the job losses and wage reductions in urban based industries such as construction, manufacturing, and services. The decline in demand will push some into poverty, and those that are already poor will fall more deeply into poverty. Declining remittances will also have negative impacts on urban households. The financial crises in East Asia and Mexico showed that urban households felt the impacts disproportionately. In Mexico’s 1994/5 “peso crisis”, urban households with workers in financial services and construction suffered the greatest income declines (48% and 35% respectively). The lack of agricultural production as a safety net for households to
fall back on also makes urban households more vulnerable.

Poor urban households, which already have very limited incomes and few if any reserves to fall back on, will be particularly vulnerable. There are an estimated one billion urban poor living in slums, in conditions characterized by overcrowding, precarious housing, limited access to basic services, insecure tenure, and at high risk for disasters, environmental risks, poor health, and social problems such as crime and violence. The infrastructure deficit in slums in most regions is enormous, particularly in Africa and South Asia where slum populations are the highest.

**SLUM UPGRADING AND SERVICES FOR THE URBAN POOR**

The World Bank has much experience with addressing the poor living conditions in urban areas through the provision of basic services and slum upgrading projects. Slum upgrading typically aims at improving the physical, social, environmental, health and economic conditions for slum residents. Programs usually include components aimed at improving water supply, storm drainage, improved road access, electricity, sanitation services, and waste collection, while broader programs also include street lighting, rehabilitation of markets, health and education services, community centers, day care centers, training programs, providing land tenure, and investments to reduce crime and violence through environmental design, street lighting, and youth recreational centers.

There are a number of lessons learned from implementation of WB projects over time which go into the design of new programs. Among these lessons are the need for early consultation with the community (which then is continued throughout the process), flexibility in allowing for in situ-upgrading and/or relocation depending on what is most appropriate, ensuring safe but realistic construction standards so that program costs are affordable, and including capacity building in projects through well designed technical assistance programs.

**USING RESULTS-BASED FINANCING SUCH AS OUTPUT-BASED AID APPROACHES FOR SLUM UPGRAADING**

OBA or performance-based grants is a mechanism that ties the disbursement of public funding to the achievement of clearly specified results that directly support the delivery of basic services such as improved water supply, electricity, roads, sanitation, waste collection, as well as health care, education, communications services, and other interventions aimed at improving community and social infrastructure. OBA approaches can be used as stand-alone operations or as part of a wider Bank intervention. OBA approaches can also be used in combination with other results-based financing instruments which focus more on the efficient use of assets rather than improved service access. This is further discussed in page 3 of this Note.

Under results-based financing schemes, such as OBA, services are contracted out to a third party and that contract (or other contractual arrangement) is the mechanism through which the results and/or output-based disbursement criteria are established. The “third party” in OBA schemes may be a private enterprise, a public utility, NGO, community-based organization, or even a separate branch or institution of government from that entity providing the official public funds.

The following main principles need to be considered in the design of an OBA scheme:

- **Subsidies need to be explicit and pre-agreed** in order to ensure transparency. Subsidy levels may be determined either through a competitive process or a non-competitive process to choose the Service Provider. Under a competitive process, the subsidy level is considered in the award criteria, which are generally: (i) the least subsidy required per pre-determined output; (ii) the greatest coverage per fixed offered subsidy; or (iii) the least connection cost per fixed offered subsidy. When a non-competitive process is used (in the case of an incumbent Service Provider), subsidy levels are determined through the establishment of standard costs or agreement on a unit cost schedule, which are verified by independent consultants during project preparation.

- **Payment on output delivery:** The performance and operational risks are borne by the Service Provider, mostly through the pre-financing of the inputs necessary to deliver the outputs against which OBA disbursements are made. The outputs are independently verified prior to payments in accordance with the payment schedule in the contract or agreement for
service provision entered between the contracting authority and the Service Provider.

- The Service Provider receives only the pre-agreed payment for the specified outputs once an Independent Verification Agent (IVA) verifies that the output has been provided. The Service Provider has strong incentives to be efficient in procuring the goods, works and services required as inputs necessary to produce the outputs, including maintaining satisfactory provision of the services.

**DEFINING THE SERVICE AND THE OUTPUT**

The definition of services should be as simple as possible. It should involve only a few key parameters, such as the number of slum households / communities upgraded (e.g., working water connections, electricity, sanitation, solid waste collection). Measures should focus on outputs such as the quantity and quality of services provided and should be linked to the Service Provider's ability and control to meet the pre-specified output. Reducing the number of defined service parameters can simplify contracting and monitoring of the OBA scheme².

![GPOBA project: Uganda Kampala water connections for the poor; new water meter.](image)

**WHY SHOULD AN OBA SCHEME BE CONSIDERED IN TIMES OF CRISIS?**

The question may arise why one should consider using an innovative mechanism during times of a financial crisis. The upgrading of slums using results-based financing instruments can be used as a response to the financial crisis by creating jobs, encouraging reform of inefficient public utilities and at the same time improving access to basic services by the urban poor. When working with an existing WB operation involving a utility, the slum upgrading schemes could be funded through, for example, the Additional Financing instrument, which is relatively quick to process. Furthermore, given the scarcity of public funds, it makes good sense to use results-based financing for more efficient allocation and target-oriented use of public resources. In addition, there is significant experience in the design and use of OBA schemes under the Global Partnership on Output-Based Aid (GPOBA) program, which has been piloting OBA schemes for the last five years. Lessons learned can be incorporated to design OBA schemes that are suitable for the current financial conditions that countries face.

There are many ways in which results-based financing can encourage utilities or Service Providers to be more efficient, thereby avoiding the need for investment in major assets. For example, an incumbent Service Provider may become more efficient by reducing non-revenue water, the “saved” water being used to connect households in urban slums to the water network rather than the Service Provider having to invest in new water production facilities. An alternative could be a Bank operation which seeks to improve service provision based on performance targets which could focus on key indicators dealing with improved planning, execution, and improvements in services. As the first two indicators focus on the improved efficiency of assets, these can be achieved using a results-based financing mechanism, sometimes referred to in the WB as Output-Based Disbursement (OBD). The third, improvements in services, can be achieved using an OBA approach, which focuses on improved service access. The OBA approach would take a traditional Bank operation one step further and disburse upon a stricter measure: poor slum households receiving direct access to the selected services. At the core of results-based financing techniques is to incentivize Service Providers to use existing assets more effectively and to provide the poor with improved access of services.

**HOW DO I ENSURE ADEQUATE TARGETING OF THE OBA SCHEME?**

With an urban slum upgrading scheme, targeting the poor should not be an issue. Adequate targeting of the scheme needs to
ensure that it is clear to whom, why, and for what the subsidy is provided. Targeting at the community or household level will depend on the type of program and may include: (a) geographic, (b) means testing, (c) proxy means testing or (d) self targeting. Where possible existing targeting schemes should be used. For example, self-targeting could be the level of recipients’ willingness and ability to pay user fees to complement the available subsidies.

**HOW TO ENSURE EFFICIENCY OF SERVICE PROVIDED?**

Task team leaders should seek to predetermine the ‘subsidy’ in the form of a reimbursement paid on agreed outputs instead of inputs. Service ‘solutions’ are partly left to the Service Provider, encouraging innovation. Efficiency can be achieved through competition (for new services) or benchmarking with the overall aim of ensuring value-for-money. Where possible, competition between Service Providers should be considered as a means of improved efficiency, innovation, and consumer responsiveness. However, given that the slum-upgrading most likely will involve existing Service Providers, competition will not be possible, and value for money will be achieved through benchmarking and unit cost studies.

**HOW TO ENSURE ACCOUNTABILITY OF THE SERVICE PROVIDERS**

The Service Provider is accountable for results and incurs a ‘penalty’ if results are not achieved. A Service Provider takes both performance and in some instances finance risks, and reimbursement to the Service Provider is after delivery of agreed and verified output to targeted end-users (i.e., the “subsidy”).

**HOW CAN PAYMENTS BE MADE? – DEALING WITH PRE-FINANCING ISSUES**

The subsidy design chosen will depend on factors such as (but not limited to) 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. Accordingly, OBA schemes typically provide subsidies or payments in the following three ways:

- **One-off subsidies** usually involve capital subsidies for access to a given service. An example is when a large portion of the subsidy is paid after the targeted beneficiaries are connected to a network and connections are verified. Given that in OBA approaches the emphasis is on service delivery rather than on physical connections, even in the case of one-off subsidies, a portion of the subsidy may be withheld and paid only after verification of a certain number of months of satisfactory service delivery.

- **Transitional subsidies** will be a useful instrument under the current financial crisis as users who before the crisis could afford services may have lost their jobs or household resources may be so low that they are no longer able to afford the tariff. These subsidies can also help ensure Service Providers remain financially viable by filling the gap between what the user is deemed able and/or willing to pay and the cost-recovery level (e.g., long-run marginal cost) of the tariff. In these cases, the output against which the subsidy is paid is the service delivered and billed by the Provider.

- **Ongoing subsidies** will be required in cases where there is a continuous gap between affordability and cost recovery – including for consumption costs. As in the case of transitional schemes, ongoing subsidies should be paid out against pre-determined targeted outputs in order to be considered OBA. With on-going subsidies, a long-term sustainable funding source should be identified. Given the scarcity of public funding as a result of the financial crisis, most likely a combination of one-off and transitional subsidies will be used.

In typical results-based financing schemes, the Service Provider is not provided with the subsidy until outputs have been delivered and independently verified. This implies that Service Providers are responsible for pre-financing the outputs. However, under the current financial conditions, the pre-financing requirement where the Service Provider uses its own cash flow or obtains a loan from a bank to finance the inputs that will result in the outputs, may need to be relaxed. Advances could be considered and/or interim milestone payments could be introduced to allow the Service Provider to have the necessary resources to undertake the pre-agreed outputs. However, it is important that the Service Provider in such a modified OBA scheme still has a strong incentive to deliver the outputs. This could be achieved, for
example, by withholding a significant percentage of the OBA payment (say 25-30 percent) until the outputs have been delivered (e.g., a water connection that is working according to pre-agreed quality parameters for at least three months after a household was connected to the water network).

Linking payments completely to performance may not always be feasible. Although payment for full performance is a powerful incentive, incentives can be fine-tuned by deducting payments for sub-optimal performance and including bonus payments for service that exceeds minimum requirements. Careful consideration should be given to the appropriate share of risks between the Service Provider, the scheme, and the service recipients.

**HOW ARE OUTPUTS VERIFIED AND MONITORED?**

Since OBA is designed for the subsidy to be reimbursed only after outputs are verified, the (ongoing) monitoring of outputs (or results) is easier. Under an OBA project, an Independent Verification Agent (IVA) will have an integral role in providing an independent assessment of the results achieved, reasonableness of the unit costing methodology, determination of the soundness of approach for cost increases, and in particular provide an opinion as to whether any unit cost variation is reasonable. Such independent audit review would provide assurances that project costs are being set in line with actual experience and that funds were deployed towards purposes intended. It may also be necessary to engage a financial auditor.

Reporting under an OBA scheme should be used as the basis for periodic ongoing disbursements, and should contain the following items: (i) level of advance, (ii) a listing of the current updated schedule of types of output and associated pre-agreed unit costs, (iii) a certified list of outputs completed and delivered, and (iv) the product of the number of outputs multiplied by their unit costs, and summed to reflect the total disbursement request.

**ESTABLISHING UNIT COSTS OF OUTPUTS**

Since unit costs of outputs are in effect a representation of the total investment costs, the setting of credible unit costs is an essential task which must be completed prior to finalizing the OBA scheme. The amount of payment required depends on the cost of providing the service to the specified standard, less any user fees from recipients. This will constitute the basis of the unit cost9.

The process for awarding contracts can be used to reduce costs and provide a market test of the amount of unit cost/payment required under the proposed OBA scheme. One strategy for doing so is to award contracts competitively to qualified Service Providers on the basis of the least payment required to provide the service.

**HOW TO DEAL WITH VARIATIONS IN UNIT COSTS, WHICH ARE PARTICULARLY RELEVANT IN THE CURRENT FINANCIAL CRISIS?**

The current financial crisis has resulted in great volatility in construction, operations, maintenance, and other costs of providing a service. When this delivery of service depends heavily on an input whose price tends to fluctuate, a mechanism for adjusting payments and or variations of the unit costs should be considered to allow for certain “pass through” elements such as increases in commodity prices e.g., electricity etc., or to deal with currency exchange fluctuations10. If possible, consideration should be given to whether the unit costs could be varied throughout the life of the OBA scheme. The intention would be to allow for cost increase or decrease depending on the actual costs of providing the service and as verified by the IVA.
**Sustainability**

Sustainability is at the core of any OBA scheme. For example, if connection subsidies are used, the tariff that is charged by the service provider needs to recover the operations and maintenance costs of providing such service. Once the OBA scheme is implemented, it will be important that an adequate legislative and regulatory framework is in place that ensures that the service provider is able to recover the costs of providing the service but at the same time that the service is provided at a minimum standard in terms of quantity and quality. Other types of OBA subsidies, for example tariff support, need to ensure that future funding is secured so as not to distort consumption patterns or hinder the service provider in the future.
ANNEX A: FURTHER INFORMATION

Examples of possible OBA applications
Examples of possible OBA applications include payment of subsidies tied to:

- Number of new working connections made (e.g., when the goal is to expand access to network services), typically to poor households;
- Verified household consumption (e.g., equivalent to the difference between a life-line tariff payable by poor households and the full tariff);
- Achievement of positive externalities (e.g., the achievement of specific environmental targets such as cubic meters of wastewater treated);
- Voucher schemes, typically for targeted disadvantaged groups in health and education projects (e.g., to be redeemed by beneficiaries with a Service Provider of their choice among those selected competitively by the government, for provision of primary health care services);
- Number of slum households / communities upgraded (e.g., working water connections, electricity, sanitation, solid waste collection).

Sources of additional information
TTLs can find more information on how to design and implement OBA projects on the GPOBA website: www.gpoba.org. Resources available on the site include case studies of OBA projects, project data, publications, etc. Funding for design and in some instances funding for subsidies is also available.

A new “Resources for Practitioners” section of the website is currently being developed that will provide online resources and a discussion space specifically for TTLs and others involved in OBA approaches. Another option for TTLs who want to deepen their knowledge is to take a two-day training course on OBA (please consult the LMS for course offerings). TTLs are also invited to join the OBA Community of Practice which is an informal group that aims to share best practices in OBA through peer-learning, knowledge-sharing, and informal networking. For more information, please send an e-mail to gpoba@worldbank.org.

Specific procurement issues related to OBA schemes
Further guidance on procurement issues is provided in “Procurement Issues in Structuring Output-Based Aid (OBA) Operations Financed by the World Bank: Guidance Note for Procurement Staff, April 11, 2008,” developed jointly by staff from the GPOBA unit of the Finance, Economics and Urban Development Department (FEU) and the Procurement Policy and Services Department (OPCPR). The note incorporates lessons learned from procurement assessments conducted under OBA pilot operations across regions, as well as peer reviewer comments.
ENDNOTES

1 The key distinguishing factor between an output and an outcome: Inputs are the resources consumed in producing and delivering a service such as labor, technology, or physical materials. Outputs are the immediate results of the Service Provider’s activities, such as the number and quality of the health, education, or infrastructure services provided. Outcomes are the ultimate effects of the services in the community, such as improvements in health or in educational attainment. Outcomes may be influenced by factors that are outside of the direct control and activities of the Service Provider and in some instances may be difficult to measure with precision.

2 In some instances it may be advisable for the OBA scheme to link at least a small part of the Service Provider’s compensation with outcomes beyond the Provider’s control. This will allow aligning the Service Provider’s interests with those of the government or the scheme administrator.

3 It must be noted, however, that competition may not always be feasible and will depend on market, service and sector conditions. For example, service delivery of water may be provided as a natural monopoly.

4 One strategy for using competition is to design the competitive process whereby the winning bidder is the Service Provider that requests the least amount of unit cost/subsidy. Another approach would be to make payments to the Service Provider once there is sufficient evidence that they have served an eligible recipient. This evidence may take many forms, including vouchers, which targeted recipients exchange for pre-specified services.

5 As discussed earlier, the Service Provider or “third party” in an OBA scheme is typically a private enterprise, but could also be a public utility, NGO, community-based organization, or even a separate branch or institution of government from that entity providing the official public funds.

6 When designing an OBA scheme some of the types of key considerations (questions) which task teams may find useful to think about in relation to the Service Provider include:
   - Does the Provider compete “for the market” or “in the market”? i.e. Does the Provider serve a single market (concessionaire) or are several Providers in a market?
   - Is the Service Provider existing or is it a green field operation? i.e. Can Service Provider be competitively selected?
   - Is the Service Provider public or private? => may determine level to which Provider is motivated by performance-based incentives.
   - If the pool of Providers is limited, would capacity building help create a larger pool of Providers?
   - Is the Service Provider accountable for providing quality services, e.g., through contract provision or accreditation?
   - Does the Provider have the technical expertise to deliver the service?
   - Does the Provider have the financial capacity to support service implementation and “pre-finance” the outputs?

7 See “Procurement Issues in Structuring Output-Based Aid (OBA) Operations Financed by the World Bank: Guidance Note for Procurement Staff, April 11, 2008.”

8 Transitional subsidies are typically used to support tariff reform. Typically the subsidy is transitioned out after a specified period of time (e.g., months or years) as the user contribution increases (and possibly as tariff levels required for cost recovery decrease with efficiency gains). Under the current financial crisis, it will be important to devise a strategy to deal with the period when tariffs are raised to ‘normal’ levels of full cost recovery.

9 In estimating the costs of project outputs during the preparation and appraisal stages, the task team must take into account alternative information sources, some of which may be technical in nature (e.g.: universities, technical government agencies, independent technical consultants) and some of which may be market-based (e.g., technical/trade associations, supplier surveys, contracted expert consultants). In setting a credible unit cost (or unit costs) of output(s) under an OBA mechanism, task teams should, when feasible, utilize more than one source for determining such costs so as to avoid a “unique source bias.”

10 Not allowing for a specific mechanism that would cover for these extraordinary events, would effectively erode the actual value of the subsidy. Payment might still depend fully on delivery; the changes in the cost of the key input could be reflected in the size of the payments or user fees. However, it is important to ensure that making allowances for these cost variations does not reduce the incentive for the Service Provider to reduce costs (e.g., through negotiation with its suppliers to attain the best price).