

## Targeting Subsidies Through Output-Based Aid

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**O**utput-based aid (OBA), or performance-based grants, can be used to help target services to the poor. Under OBA schemes, service providers (usually the private sector but in some cases also community or nongovernmental organizations or public sector utilities) are compensated only after delivery of a specified output, such as water connections of a specified quality, to a targeted beneficiary. In most cases that targeted beneficiary would be a poor household or community. Subsidies are provided in the form of payments for the provision of service to targeted groups to help cover the gap between the cost of provision and the user's ability to pay.

Targeting subsidies involves challenges. OBA can provide opportunities to enhance targeting and lead to greater transparency in reaching the poor. While OBA is not yet mainstreamed in all infrastructure and social services sectors, the principles and mechanisms are compelling, and initial results promising.<sup>1</sup>

### The challenges

Subsidies have long been used to make basic services more affordable and are seen as a vehicle for redistributing resources. But universal subsidies are widely agreed to be inefficient and fiscally unsustainable. Good targeting practices can help both reduce the need for subsidies and ensure that they reach the intended beneficiaries.

### What are the constraints?

If the need for targeting is generally acknowledged, why haven't subsidies been more effectively targeted to reach the poorest? The failure to do so in the infrastructure and social services sectors can be attributed to a host of factors:

- **Lack of incentives for politicians** to support programs targeted exclusively to the poor.
- **Lack of understanding** of the circumstances, preferences, and types of service useful to the poor.
- Requirements for sophisticated, and often **costly, data systems** to provide accurate measures of income.
- **Lack of awareness resulting in low uptake** by the target group.

- **Corruption**, which motivates people to provide false information to obtain service to which they are not entitled, or to exploit vulnerable target groups.
- **Lack of incentives for service providers** to connect poor households eligible for lower “social tariffs” that are part of cross-subsidy schemes.

For utility services, additional factors come into play. In some poor countries large swaths of the population, including even the better-off, may not be connected. Where this is so, politicians and service providers may see greater gains in serving the better-off customers first—even though the services may be subsidized through utility tariffs that are inefficiently low, leading to wasteful use of public resources. The notion that the poor cannot afford to pay sustainable tariffs may be another factor. Yet many interventions, as well as studies and surveys, have shown that a large share of poor people are willing and able to pay sustainable tariffs—and usually already spend much more on alternative services such as water from water vendors or batteries for power supply.

### Where do subsidies go?

The equity and effectiveness of subsidy targeting is commonly evaluated by the extent of coverage of the target group and the “leakage” to non-target groups (also known as errors of exclusion or inclusion). Experience in many countries suggests that projects in infrastructure and to some extent in social services have failed to target subsidies effectively to the poor and vulnerable. Many have lacked an explicit target-

<sup>1</sup> This note draws upon lessons from a wide range of OBA projects, although mostly from GPOBA-funded projects for which detailed targeting information is readily available.

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ing mechanism for subsidies, and any efficiency gains achieved were purely incidental.

In the water and energy sectors, subsidies are most commonly channeled through the tariff so that users do not pay the full cost—sometimes not even the running costs—of the service. A seminal study on tariff subsidies for water and electricity services found that these subsidies are invariably regressive, benefiting the non-poor more than the poor (Komives and others, 2005). This is due largely to one of two reasons: the poor are not connected to the system in the first place; or there are only minimal differences in consumption patterns between the rich and the poor, so that quantity-based subsidy schemes such as increasing block tariffs actually lead to considerable leakage. The study argues that alternative forms of targeting—such as connection subsidies that support initial access rather than consumption—would be more effective in reaching the poor.

Targeting also presents a challenge for the social services sectors. This is partly because the poor do not have access to facilities—a problem particularly serious in rural areas—or because funding is concentrated on services used mostly by the non-poor, such as secondary and university education. Additionally, public facilities are usually of poor quality due to mismanagement and/or the diversion of funds. Therefore, the key for subsidy targeting in these sectors is to ensure that well-trained professionals (e.g., nurses or teachers) are actually delivering a service in a form that the poor can and choose to use, for example through contracting schemes that pay on the basis of services delivered to the poor.

## OBA and targeting

OBA schemes can provide subsidies in three ways: transitional tariff subsidies (which taper off as user contributions increase), ongoing subsidies, or one-off subsidies such as connection subsidies. Which subsidy design is chosen will depend on such factors as the sustainability of the funding, the capacity for administering the subsidy scheme, and the type of service to be subsidized.

### Choosing subsidy design

For utility services, ongoing OBA schemes, such as a well-known one used in Chile's urban water sector, can be effective in reaching the poor only if they are connected to the system. Thus in the poorest countries, most OBA schemes in water, energy, and telecommunications instead involve one-off subsidies enabling initial access. For example, an OBA subsidy may be used to help connect a poor household to the water or electricity network or to reduce a community's contribution for

provision of pay phones or internet points of presence. Projects using OBA connection subsidies usually rely on the target population being able to afford sustainable tariffs that cover ongoing costs of service provision. But this is often not a major hurdle; as noted above, the poor usually are paying more for alternative services.<sup>2</sup>

OBA projects in roads, health, and education normally fund the ongoing provision of basic services or maintenance. OBA road maintenance schemes require ongoing subsidies, often funded through road funds. OBA health schemes, to ensure continued access to care for the poor, need to channel subsidies in an ongoing manner through health care providers as they deliver agreed services (such as well-child visits) over a period of time. But some health projects may focus on one-off interventions, such as safe-child delivery.

### Sharpening traditional forms of targeting

No matter the subsidy design, all OBA schemes must specify the outputs against which subsidies will be disbursed—such as household water connections, installed solar systems, or medical treatments—and consequently can identify the beneficiaries more clearly than traditional input-based schemes. Eligibility criteria for beneficiary households can be clearly defined and made a precondition for subsidy disbursements. The third-party verification that triggers disbursement of OBA funds can sometimes even include verification that the targeting criteria have been met, so that subsidies have to be paid only for eligible households or individuals.

OBA also helps to address the issue of low uptake by the poor, thereby ensuring greater effectiveness of a subsidy scheme. For example, in the case of utility services, because a proportion of payments to providers (or “supply-side” subsidies) are withheld until proof of at least one billing cycle, service providers take on additional demand risk—and so have an incentive to address the risk of low uptake. For example, both the Rural Community Water Project in Andhra Pradesh and the Senegal On-Site Sanitation Project work with NGOs to promote community participation to improve uptake.

Finally, there are also some questions about the effectiveness of targeting in relation to the quality of services for the poor. This is another area where an OBA design can help ensure quality of service is not com-

<sup>2</sup> Under OBA schemes, tariff affordability issues for the very poorest can be partially mitigated by subsidizing connections such as public water points, which have lower running costs per capita, and by ensuring appropriate payment schemes for the poor to go along with the subsidy scheme.



An OBA scheme in Armenia limits eligibility to the poorest and most vulnerable, using “poverty scores” assigned by the government’s Poverty Family Benefit Program to identify beneficiary households. (Photo © World Bank)

promised: the definition of “outputs” includes quality parameters and in some cases even services that extend out for several years, such as maintenance of and parts supply for solar home systems, to help ensure a certain degree of quality and sustainability.

In sum, output specification and verification, payment only on delivery of outputs, and demand management incentives all allow OBA to more effectively reach the poor using some of the traditional methods of targeting, such as geographic, self-selection, and means-tested targeting.

*Geographic targeting* is usually the easiest way to reach the intended beneficiaries. It is useful in areas in which intended beneficiaries are concentrated and few people outside the target group live. For projects in such areas, excluding unintended beneficiaries can be costlier than including them. One example is a GPOBA-funded water project in Uganda that will be focusing on slum areas of Kampala, where most households are very poor and excluding the few non-poor households would be too costly.

An analysis of GPOBA projects shows that most use geographic targeting. More than half use it as the only targeting mechanism. Many GPOBA projects are pilot projects in very poor countries and their small size makes geographic targeting relatively easy.

*Self-selection targeting* involves designing projects so that outputs chosen by poorer beneficiaries receive a

### Box 1 Nepal Biogas Support Program—Combining Geographic and Self-selection Targeting

The GPOBA and Community Development Carbon Fund-supported Biogas Support Program in rural Nepal provides household-size biogas plants to families. The subsidies vary according to the plant’s size and location. Smaller plants, used by poorer families, receive higher subsidies than larger plants. Wealthier families, with more livestock to provide input, prefer larger plants with greater gas output. Plants in remote mountainous regions, where the population is poorer, receive a higher subsidy than plants in the Terai lowlands, where the population is richer.

higher share of subsidies. Subsidies can be targeted progressively by providing higher subsidies for more basic services—for example, smaller solar home systems, as in a rural electrification project in Bolivia—or by subsidizing services less attractive to the rich—such as public water points, as in a GPOBA-funded water project for small towns in Uganda.

Self-selection targeting can also be achieved by introducing a service to an unserved area and starting a subsidy scheme only after some time. Households that can afford to connect immediately will do so, as long as the benefits of service during the time lag will outweigh the cost. With this approach, self-selection can be used even for homogeneous outputs such as electricity connections, as is being attempted in an IDA/GPOBA-supported electricity project in Ethiopia. Self-selection targeting is also widely used in the health sector. Because wealthier patients tend to favor more sophisticated, up-market facilities, OBA projects usually finance more basic health care services. Many GPOBA projects have used self-selection to complement geographic targeting (Box 1).<sup>3</sup>

*Means-tested targeting* is used in several OBA schemes in middle-income countries. Means testing involves measuring a beneficiary’s wealth to assess whether a subsidy is warranted. Such schemes require more advanced administrative systems, as in the case of the urban water project in Chile mentioned above. For this reason, OBA schemes that rely on means testing usually piggyback on broader welfare programs that identify poor households for a variety of public services. This is

<sup>3</sup> OBA projects in roads tend to use geographic targeting. Because they are a “public good” (meaning that no one can easily be excluded from using them), most forms of targeting are difficult. Ideally, OBA in roads would be complemented by self-selection targeting for transport services such as buses.

**Table 1: Cost and Effectiveness of Targeting Mechanisms**

Targeting approach	Cost/admin. complexity	Targeting effectiveness
Geographic	Low	Low – Moderate
Self-selection	Low	High
Means testing	High	High
Proxy means testing	Moderate	Moderate
Community-based	Moderate – High	Moderate

being done in an urban gas service project in Armenia, for example (see photo). One approach used by some OBA projects includes *proxy means testing*, in which easily observable characteristics such as possession of indicative assets, for example a dwelling of a certain size, are used as a proxy for income. Marie Stopes International, an NGO that serves as management agency in a health project in Uganda, jointly funded by KfW and GPOBA, uses a simple questionnaire assessing assets owned, number and quality of meals per day, and other indicators of potential beneficiaries to determine eligibility.

*Community-based targeting* relies on collaboration with the local community or its representatives to help identify the community members most in need of the service. Community involvement can increase ownership and reduce the risk of targeting criteria being rejected by the population in the service area. But community-based targeting may have drawbacks, such as the risk of being hijacked by special interests. Moreover, this form of targeting can be costly and time consuming, as evidenced by an OBA water project in Cambodia.

## Conclusion

Targeting can result in improved equity, effectiveness, and efficiency (including sustainability) in the use of funds, although the costs of targeting must always be weighed against its potential benefits. Many existing targeting strategies for channeling subsidies for basic service provision to the poor have not reached those most in need. OBA, while no panacea, is a promising mechanism for enhancing the effectiveness of schemes for targeting subsidies to the poor.

With OBA, the number of beneficiaries reached through a scheme should be readily apparent. For its own projects, GPOBA has been able to verify reports that approximately 258,000 poor people have been provided with targeted services for about US\$8 million of GPOBA subsidies disbursed. As more outputs are delivered and more services used, the subsidies disbursed and the targeted beneficiaries reached should continue to increase. As we gather more information on these projects, including from impact evaluations and other reports which should provide evidence on the reach, quality, and sustainability of the services provided, more analysis can be conducted on whether OBA schemes can enhance the targeting effectiveness of infrastructure and social services delivery.

## References

Komives, K., V. Foster, J. Halpern, and Q. Wodon. 2005. *Water, Electricity, and the Poor: Who Benefits from Utility Subsidies?* Directions in Development series. Washington, DC: World Bank.

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