

## Output-based aid: precedents, promises, and challenges

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More efficient delivery of infrastructure and social services in developing countries, and better targeting of these services to those most in need, are critical to alleviating poverty and developing economic opportunities for the poor. Traditional approaches to aid and public spending have often failed to yield sustained improvements in services, particularly for the poorest. Thus an important question for developing countries and for the international development community is how to deliver and target public services in ways that promote efficiency and innovation, increase accountability for performance, and—in a world of limited budgets—leverage public resources with private financing. This is the question to which “output-based aid” schemes, the focus of this book, seek to provide at least a partial answer.

Governments in both developed and developing countries have introduced a variety of reforms in recent years to improve the delivery of public services. These reforms have included using “quasi-contracts” between government agencies, commercializing public agencies, contracting out specific services to the private sector, and transferring responsibility for providing services to the private sector through concessions or outright privatization. In contrast with more traditional approaches, these schemes seek to define objectives and specify expected performance in terms of outputs (or in some cases outcomes) rather than focusing on inputs.<sup>1</sup>

Experience with such schemes provides important insights into both the promise and the challenges of using output-based approaches to improve the delivery of services and to better target government and donor funds. Of particular relevance is experience with performance-based contracting within the public sector and with engagement of the private sector for the delivery of infrastructure services.

*Performance contracting* is generally used to increase the efficiency of service delivery for core government activities where market failures weigh against market provision. The arrangements take a variety of forms, involving both quasi-contracts between public agencies and enforceable contracts with

parties outside the public sector. Through clear identification of public policy objectives and careful specification of expected performance, performance contracts have the potential to introduce strong incentives and competitive disciplines for the delivery of desired service outcomes.

Experience in OECD countries points to significant benefits from public sector performance contracting: lower costs, better quality of service, greater innovation and responsiveness, and a sharper focus on core government responsibilities. (Quantifying these benefits has been difficult, however, because information on performance before the reform is typically limited, and the contributions of different factors to the outcomes cannot always be identified.) But the OECD experience also demonstrates the challenges involved in setting clear, meaningful performance targets, designing incentive systems aligned with those targets, and evaluating performance. Moreover, preparing and managing performance contracts can involve substantial up-front costs, particularly for pioneering schemes with no precedents (OECD 1999).

Schemes for *private participation in infrastructure*, aimed at mobilizing private incentives for efficiency and innovation in service delivery, have expanded dramatically in the past decade, with generally positive results. Across a wide range of countries and sectors, reforms that transfer significant commercial risk to the private sector have typically improved efficiency in delivering services and expanded their availability.<sup>2</sup>

Analyses comparing the actual effects of reforms with reasonable counterfactuals show that in most cases private sector reforms have yielded significant welfare gains—even in countries starting out with weak institutions. But they also suggest that the benefits of private participation and its effects on distribution are sensitive to the design of contracts and the related market structure and regulatory reforms.<sup>3</sup> Time and again, sound contract design, attention to facilitating competition, transparent project procurement, regulatory independence and accountability, and sound strategies for allocating and mitigating risk have proved to be essential for sustainable, beneficial projects.

### **Drawing on experience to improve the delivery of aid**

Output-based aid draws on the experience and tools of public sector performance contracting and private infrastructure schemes. Service delivery is delegated to third-party providers under contracts designed to provide incentives for efficient, well-targeted service delivery, in part by tying a significant part of the compensation to delivery of specified outputs or results.

Public funds from external donors or domestic tax revenues may complement user fees—or serve as proxies for user fees for services that are largely public in nature.

Output-based aid extends some of the core features of traditional government contracting and private infrastructure reforms. It goes beyond contracting by mobilizing commercial financing of service provision. And it differs from many private infrastructure schemes by complementing user fees with carefully targeted subsidy payments. Both these characteristics increase the potential for mobilizing private funding for critical public services while ensuring a high level of accountability for the use of public funds.

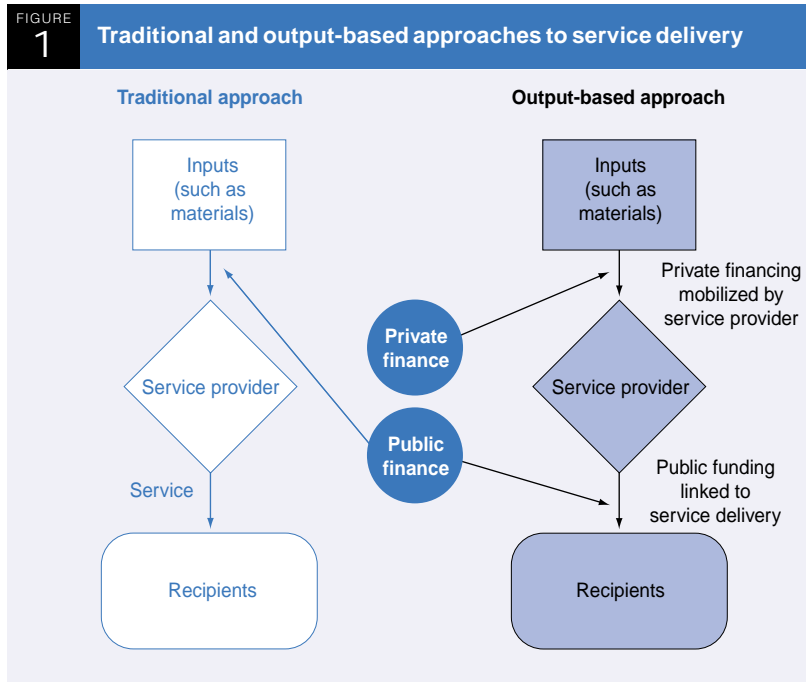
Many developing countries—and many organizations in these countries—have adopted aid schemes with output-based elements:

- In Chile subsidies for water services to low-income households flow to providers only when a qualifying household has received the service and paid its share of the bill (see chapter 2). Guinea has also used an output-based subsidy scheme for water: an International Development Association credit was used to ease the transition to cost-covering tariffs (see chapter 3).
- In Haiti and Romania primary health care providers in rural areas receive compensation based on their delivery of defined basic services, with an emphasis on preventive care (see chapters 7 and 8).
- In Peru telecommunications companies compete to expand and sustain services in rural areas on the basis of the smallest subsidy required (see chapter 1).

These examples stand in stark contrast to aid projects focusing on financing facilities (building a health clinic, a telecommunications network, or a water treatment and distribution system) or other inputs (such as books and medicines; figure 1). They also stand in contrast to traditional public delivery of services in many developing countries, which too often has produced disappointing results in terms of both efficiency and access.

### **Designing output-based aid schemes: the challenges**

In designing output-based aid schemes, the overarching goal is to ensure that they channel public funds in a way that provides incentives for improving the delivery of services to the intended recipients. That requires designing schemes that help mobilize commercial funding of service providers, that expand nongovernmental supply capacity, and that ensure accountability for results. It is also important to design schemes in ways that build and reinforce



good governance, particularly in awarding and monitoring contracts, and that ensure cost-effective administration.

There are many ways to design such schemes, and the approach that is most appropriate will vary across sectors and countries. (For a detailed discussion of the issues to be addressed and the factors driving key design decisions see the checklist in part 3.)

#### Defining intended results

Clear definition of the intended results is one of the hallmarks of output-based schemes. This involves deciding who the recipients should be—all consumers, or only those meeting certain eligibility requirements?—and what the service should be.

In an ideal world schemes would focus on broadly defined outcomes, such as well-educated children or households with adequate access to potable water. In practice, however, developing effective contracts requires much more precision, and contracts need to account for the fact that some factors affecting outcomes will be beyond the contractor's control. Contracts usually need to focus on specific outputs—such as an education

service or household connections to a water system—that meet specified requirements. Correctly identifying indicators for these outputs is critical: misspecified or incomplete indicators can lead to counterproductive or biased behavior by service providers. In some cases defining and verifying an acceptable level of quality for even specifically identified outputs may be so difficult that the contract will also have to address inputs, such as the choice of technology, the quality of the materials, or the qualifications or reputation of the service provider. Even so, schemes that can focus primarily on outputs or outcomes offer the greatest promise, as they create opportunities and incentives for contractors to discover new and better ways of achieving the intended results.

Defining the service to be delivered often involves tradeoffs between price and quality. Some schemes can be designed to allow intended recipients to choose a bundle of services based on their preferences and ability to pay. Others will need to nail down such choices in the design of contracts. In these schemes especially there will be benefits from getting the input of the intended recipients on the design of services and possibly from using different approaches in different areas, to match local preferences and circumstances.

The definition of the subsidized service also needs to take into account budgetary constraints and the sustainability of the subsidies. These considerations may lead to a narrower definition of eligible recipients or to a decision to direct public funds to the one-time costs of service connection—typically the main impediment to expanded access to services—rather than the ongoing costs of consumption.

#### Choosing the environment for service delivery

A basic design choice is whether to provide the service in a competitive market or through monopolistic supply arrangements. For many services, schemes can use vouchers or similar instruments to give consumers choice over their service provider, creating incentives for efficiency and responsiveness to clients.

For other services, concerns about potential market failures or subdued supply response might lead to a decision to grant a monopoly in a particular area. This choice requires decisions about how long the monopoly should last, how far it should extend, and how best to ensure that the service provider faces incentives for efficiency. Competitive bidding for time-bound concessions can provide a useful discipline over such suppliers and may also help in gauging the level of public funding required.

#### Deciding which service providers are eligible

Experience with public sector contracting schemes and with infrastructure reforms reinforces the importance of ensuring that service providers are in a position to respond to incentives and that they operate at arm's length from regulators and the funding source. Providers under output-based schemes need to pass the same tests. Most public agencies fail both.

That does not mean that output-based schemes should be limited to the international private sector. Depending on the service, small-scale local entrepreneurs could be important suppliers—and so could community groups or nongovernmental organizations. When considering whether to include these groups, however, an additional concern might be whether it is possible to establish a “level playing field” between suppliers, so as to reap the benefits of competition.

#### Choosing the form, level, and structure of payment

The form, level, and structure of the subsidy payment to service providers are crucial in determining the incentives they face and the possibility of mobilizing private financing. Subsidies usually take the form of cash payments. The level of the payment depends largely on the expected cost of delivering the service, net of expected revenues from other sources, such as user fees. For schemes that involve concessions, one strategy for determining the appropriate subsidy is to award the concession to the firm willing to provide the service for the smallest amount. In other cases the subsidy might be based on estimates of costs and of recipients' willingness and ability to pay for the service.

Determining the structure of the payment involves two main issues. First, how tightly should payment be linked to performance? Should most of the payment take the form of a fixed fee (which might still be voided if performance falls below some minimum level), or should most be linked directly to performance against specific indicators? Linking pay to performance indicators provides stronger incentives, but increases the risk that the supplier will engage in undesirable behavior (such as cutting costs by reducing quality) where quality is hard to specify and monitor. Second, should the service provider receive some up-front payment (which might be subject to deductions in the case of nonperformance), or should the provider be paid only after satisfactory delivery of services has been verified? Here again, payment linked to performance indicators (in this case, satisfactory delivery of services) provides sharper incentives, but it may need to be adapted if service providers face difficulties in mobilizing financing for service delivery. Hybrid schemes

combining fixed or up-front payment with payment linked to performance indicators are usually feasible only when the service provider has been awarded a monopoly.

#### Designing effective administration

Designing effective administrative arrangements for output-based schemes requires resolving a host of issues. A threshold question is their scope. Should schemes be established for each narrowly defined sector (rural electrification) or encompass a broad range of services (rural infrastructure)? Should they cover small subnational jurisdictions or have national or even international coverage? And should a separate scheme be established for each funding source, or could schemes pool funding from multiple sources (for example, a portfolio of donor funds)? Broader schemes promise lower administrative costs and may help pool expertise, but they may also be cumbersome and time-consuming to implement.

Once the scope of a scheme is defined, who should be entrusted with management—managing funds, designing and awarding contracts, monitoring and verifying service delivery, and paying the service providers—a private firm, a nongovernmental organization, or a public agency? An important consideration in this choice is which will be most effective in establishing credible arrangements that win the confidence of service providers and funding sources while also helping to develop good governance practices.

Finally, should one entity be responsible for all aspects of the scheme's administration, or should some functions be delegated or contracted to others? In some cases there may be advantages in having regulatory bodies, nongovernmental organizations, or communities monitor and verify the delivery of services. And local microfinance institutions or other intermediaries could play a role in the payment scheme.

#### Conclusion

Experience with contracting for service delivery, through public sector performance contracting and private infrastructure schemes, suggests cause for both optimism and caution for output-based aid initiatives. The case for optimism: public sector contracting and private infrastructure schemes appear to have improved outcomes and raised welfare, even in countries starting out with weak institutions. The case for caution: there is increasing evidence that the size of the benefits, and the extent to which they reach the poor, depend crucially on the incentives created for service providers—

through the details of contracts, through competitive pressure, and through regulatory oversight.

This book is aimed at stimulating thought and debate about potential applications of output-based aid schemes to improve the delivery of basic services to the poor in developing countries. The cases it presents are not intended to be perfect examples of such schemes. Instead, they illustrate some of the key challenges in channeling tax and donor funds toward specific results and creating incentive structures that ensure efficient achievement of those results—and thus reduce the subsidies needed. Together with the preliminary checklist of design issues that follows these cases, they will, it is hoped, cast light on both good practices and potential pitfalls in contract design and implementation for output-based aid schemes.

### Notes

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1. Inputs are the resources—such as employee time, buildings, and equipment—used to produce goods and services. Outputs are the goods and services themselves, such as drinking water supplied or health services delivered. And outcomes are the consequences for consumers or the community resulting from the outputs supplied—such as an increase in productive time as a result of improved

access to potable water, or a reduction in disease as a result of effective preventive health care.

2. The long time horizons of large-scale infrastructure projects, however, mean that full evaluations are possible only after a long period.

3. For a good survey of the theoretical and empirical literature on the impact of privatization, see Shirley and Walsh (2000). For an overview of current data on the distributional effects of these reforms that focuses on Latin America, see Estache, Gómez-Lobo, and Leipziger (2000).

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