

# **Making Services Work for Poor People**

---

*Shantayanan Devarajan*

*Ritva Reinikka*

The World Bank Group

July 25, 2002

The topic of this paper is the theme of the *World Development Report 2004*. This paper presents some of our preliminary ideas on the subject. They do not necessarily represent the views of the World Bank. We are grateful to Jeffrey Hammer, Emmanuel Jimenez, Bernadette Kamgia, Michael Kremer, Magnus Lindelöw, Nicholas Stern and participants at the May 2002 AERC Plenary Session for helpful comments and suggestions in developing some of the ideas in the paper.

## Contents

I.	Introduction.....	1
II.	Some Examples of Making Services Work for Poor People .....	4
III.	Elements of a Framework for Analyzing Service Delivery.....	9
3.1	The Policymaker and the Service Provider .....	11
3.2	The Service Provider and the Client .....	12
3.3	The Client and Policymaker .....	13
IV.	Concluding Remarks .....	14
	References.....	16

## Boxes, Tables, and Figures

Box 1.	Millennium Development Goals
Table 1.	Growth Is Not Enough
Table 2.	Benefit Incidence of Public Spending?
Figure 1.	Private Share of Primary Enrolments (percent)
Figure 2.	Relative Performance of NGO Contracting Schemes in Cambodia

## I. Introduction

Over the last decade, a consensus has emerged that poverty is multi-dimensional. Along with income, health, education, gender equality and a sustainable environment are now seen as integral elements of human well-being. Nowhere is this consensus better reflected than in the Millennium Development Goals (MDGs), an unprecedented agreement by the development community about the goals of poverty reduction (Box 1). The MDGs range from income poverty (living on less than \$1 a day) to child mortality and primary education, to gender equality, maternal mortality and safe water and sanitation. That each goal has measurable targets to be reached by 2015 also means that the MDGs enable the development community to monitor its progress toward poverty reduction.

### **Box 1. Millennium Development Goals**

Each goal is to be achieved by 2015, compared to 1990 levels:

- 1. Eradicate extreme poverty and hunger**
  - Halve the proportion of people with less than one dollar a day.
  - Halve the proportion of people who suffer from hunger.
- 2. Achieve universal primary education**
  - Ensure that boys and girls alike complete primary schooling.
- 3. Promote gender equality and empower women**
  - Eliminate gender disparity at all levels of education.
- 4. Reduce child mortality**
  - Reduce by two thirds the under-five mortality rate.
- 5. Improve maternal health**
  - Reduce by three quarters the maternal mortality ratio.
- 6. Combat HIV/AIDS, malaria and other diseases**
  - Reverse the spread of HIV/AIDS.
- 7. Ensure environmental sustainability**
  - Integrate sustainable development into country policies and reverse loss of environmental resources.
  - Halve the proportion of people without access to potable water.
  - Significantly improve the lives of at least 100 million slum dwellers.
- 8. Develop a global partnership for development**
  - Raise official development assistance.
  - Expand Market access

Unfortunately, without concerted action, many countries, especially those in low-income Africa and South Asia, will not reach these goals by 2015 (World Bank [2002], Sahn and Stifel [2002]). How then can we accelerate progress toward the MDGs? At least two findings stand out:

- Growth is not enough (Table 1). While per-capita GDP growth has a significant effect on health and education outcomes, just as it does on poverty reduction, the magnitude of the effect is much smaller for the human-development indicators. For instance, the growth elasticity of poverty is between 1 and 2, whereas the

growth elasticity of infant mortality is between 0.1 and 0.2 (Pritchett and Summers 1996), and that of primary enrolment is around 0.4 (Schultz 1987).

- Increasing public expenditures is not enough. Since growth alone may not be sufficient, many observers have called for an increase in financial resources going to health and education, in order to accelerate progress towards those MDGs. However, there is considerable evidence that increasing public expenditures in health and education, if current patterns of allocation and use continue, will not on average improve outcomes in these sectors. For example, the cross-country evidence shows that public expenditures have no significant effect on health and education outcomes (covering five of the MDGs), when you control for the country's level of per-capita GDP and a small number of socio-economic variables (Filmer, Hammer, and Pritchett 2000, Filmer 2001). To be sure, these cross-country regressions at best only tell us what the average relationships are. There are individual countries, and programs within countries, where public spending has had a powerful effect on outcomes. Nevertheless, this second finding is particularly troubling since the international community has also called for an increase in domestic and external financing to accelerate progress toward the MDGs (Devarajan, Miller, and Swanson 2002). If current patterns of public-expenditure productivity continue, this additional financing is unlikely to make a difference.

**Table 1. Growth Is Not Enough**

	<i>Poverty headcount</i>		<i>Primary education enrolment</i>		<i>Infant mortality per 1,000</i>	
	<i>Target</i>	<i>2015 growth alone</i>	<i>Target</i>	<i>2015 growth alone</i>	<i>Target</i>	<i>2015 growth alone</i>
	East Asia	14	3	100	100	14
Europe and Central Asia	1	1	100	100	9	22
Latin American and the Caribbean	8	7	100	100	14	30
Middle East and North Africa	21	1	100	92	20	46
South Asia	22	18	100	87	29	70
Africa	24	40	100	64	33	87

*Source:* Global Economic Prospects, Devarajan (2001).

Why does public expenditure on average have such a limited effect on health and education outcomes? We can break the problem down into at least four components. First, governments may be spending on the wrong goods or the wrong people. A large portion of public spending on health and education is devoted to private goods—ones

where government spending is likely to crowd out private spending (Hammer, Nabi and Cercone 1995). Furthermore, most studies of the incidence of public spending in health and education show that the benefits accrue largely to the rich and middle-class; the share going to the poorest twenty percent (where it can make a difference) is always less than 20 percent (Table 2).

**Table 2. Benefit Incidence of Public Spending**

<i>Country/year</i>	<i>Health</i>		<i>Education</i>	
	<i>Poorest 20% of population</i>	<i>Richest 20% of population</i>	<i>Poorest 20% of population</i>	<i>Richest 20% of population</i>
Côte d'Ivoire (1995)	11	32	13	35
Ghana (1992)	12	33	16	21
Guinea (1994)	4	48	5	44
Kenya (1992)	14	24	17	21
Madagascar (1993)	12	30	8	41
South Africa (1994)	16	17	14	35
Tanzania (1992/93)	17	29	14	37

*Source:* Castro-Leal, J., L. Dayton, L. Demery and K. Mehra (1999).

Second, even when governments spend on the right goods or the right people, the money fails to reach the frontline service provider. In Uganda in the early 1990s, the share of nonwage recurrent expenditures for primary education actually reaching the primary school was only 13 percent (Reinikka and Svensson 2001). There was considerable variation in grants received across schools but larger schools and schools with wealthier parents received a larger share of the intended funds (per student), while schools with a higher share of unqualified teachers received less. These findings are comparable to similar studies in Ghana and Tanzania (for a review see Reinikka and Svensson 2002).

Third, even when the money reaches the primary school or health clinic, the incentives to provide the service are often very weak. The service providers may be poorly paid and hardly ever monitored. They respond to incentives from the central-government bureaucracy, which is mostly concerned with inputs rather than outputs. The “clients”, meanwhile, be they schoolchildren, parents, patients or expectant mothers, have limited knowledge and even less power to hold the service provider accountable.

Fourth, even if the services are effectively provided, households may not take advantage of them. For economic and other reasons, parents pull their children out of school or fail to take them to the clinic. This “demand-side” failure often interacts with the supply-side failures to generate a low-level of public services and outcomes among the poor.

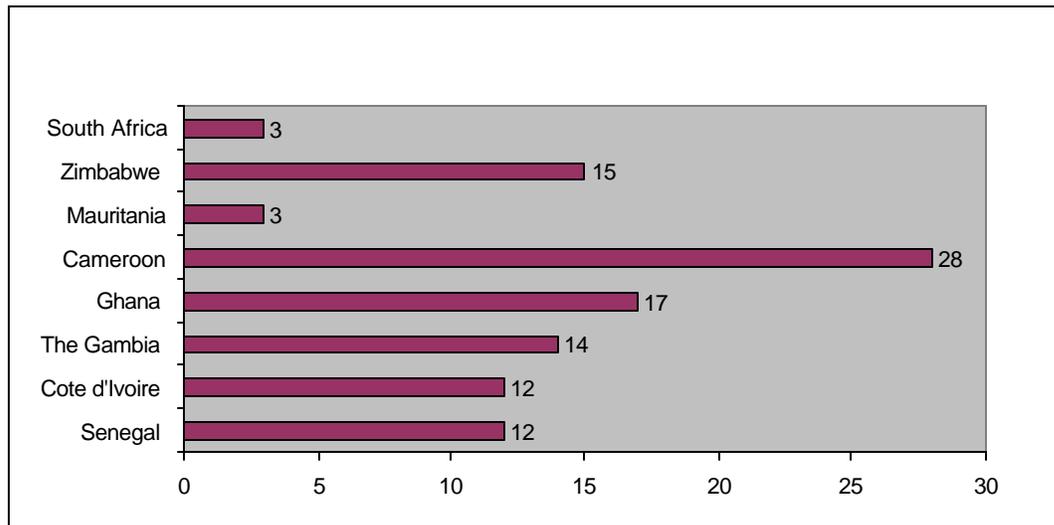
The *World Development Report 2004* is aimed at making services work for poor people, so that we can make greater progress toward the MDGs. This paper is an introduction to that report. In section II, we examine cases where policies have resulted in better service delivery, as well as the reasons why in other situations they have not. In section III, we use these examples to develop a framework for identifying public actions

that could result in better service-delivery outcomes. We describe what research has to say about the different elements of the framework. Finally, in section IV, we highlight some of the critical, unanswered questions in this area. Throughout the paper (and the report), our focus will be on health, education and water services, because they are critical to achieving the human-development MDGs. While other inputs, such as roads and electricity, can have a significant effect on health and education outcomes, we focus on those services that are transactions-intensive, where the problem of organizing and delivering the service is crucial. Many of the lessons obtained from frontline service delivery in health, education, and water are, however, applicable to other services as well.

## **II. Some Examples of Making Services Work for Poor People**

The four reasons why public expenditure has such a weak relationship with human-development outcomes provides a framework for examining the successful and unsuccessful attempts at improving service delivery. The first reason—that governments may be misallocating resources—stems from the usual argument that governments should intervene only if there is a market failure or redistributive rationale. Note that this is an argument for government *financing* of these activities—not necessarily for government *provision*. We discuss below alternative types of service providers for publicly financed goods and services. What is worth noting here is that, despite the evidence on externalities in primary education and health, there is substantial private financing of primary education and health in developing countries (Figure 1). Clearly, there is private demand for these services, even (or maybe especially) among the poor. Furthermore, the presence of government failure may undermine the classic arguments for public financing based on market failure. In India—where 80 percent of health expenditures are private—the poor frequently bypass free, public clinics to use fee-based private services because the latter are often better equipped, including with medical personnel (World Bank 2001). A similar phenomenon has been observed when clinics or schools levy user fees for recurrent expenditures, such as textbooks or medicines (Burnett and Kattan 2002, Litvack and Bodart 1993). In Kenya, all such recurrent expenditures in primary schools are paid by the parents of schoolchildren. To be sure, these user fees have in some cases prevented poor families from having access to health care and education. But as the Litvack and Bodart study of Cameroon showed, the introduction of user fees *increased* use by poor people of the local clinic. Previously, they had to travel long distances to the nearest town because the local clinic lacked essential medicines and instruments.

**Figure 1. Private Share of Primary Enrolments**  
(percent)



Source: EdInvest 2000, World Bank.

Support for user charges for social services comes also from cross-sectional estimates showing small price elasticities for education demand (for example, Jimenez 1987). When there are large policy changes, however, evidence from a number of cases where user fees were abolished points to a different outcome. Perhaps the most remarkable feature of the 1997 universal primary education initiative in Uganda was the doubling of overall enrolments following the removal of school fees (Appleton 2001). Similar enrolment surges occurred as a result of comparable initiatives in Kenya and Tanzania in the 1970s, and more recently in Malawi in 1994 when enrolments rose 50 percent following the abolition of primary school fees (Reddy and Vandermoortele 1996). Had we used data from Uganda before the removal of fees, we would have obtained small—and indeed perverse—estimates of the price elasticities for enrolments. In fact, the actual response of enrolments to the abolition of fees was very strong. Similarly, randomized experiments from Kenya show that an NGO program that provides school uniforms — the most significant private cost of education in Kenya — increased years in school by 17 percent and grade attainment by 15 percent (Kremer, Moulin, and Namunyu 2002).

Payments by households or local communities addresses the second weak link in the chain as well, namely, the problem of central-government allocations not reaching the service provider. The provision of health and education services, especially, involve substantial non-wage recurrent expenditures, such as textbooks, chalk, medicines, syringes, etc. Yet these are the very expenditures that “leak” from initial government allocation to delivery agency. At least two other factors contribute to the under-financing of these expenditures. First, much donor financing, including all World Bank investment operations, only pay for capital expenditures. Recurrent expenditures are covered by domestic resources. But governments rarely take into account their ability to cover the recurrent costs when deciding on a donor-financed investment project (World Bank 1997). As a result, the African landscape is littered with schools without chalk and textbooks, clinics without medicines. When, in Uganda, the World Bank and other donors

switched their assistance to untied budgetary support, the recurrent budget was able to accommodate the increase in the teaching force needed to lower the student-teacher ratio, which had reached 100 to 1.

The second factor that contributes to the under-financing of non-wage recurrent expenditures is that, within recurrent expenditures, the lion's share goes to wages and salaries. With their political power, teachers and doctors are able to protect their incomes when there is pressure for budget cuts. The only thing left to cut, therefore, is non-wage operations and maintenance expenditures. Many governments have responded by creating a second class of teachers who are outside the civil service, and are correspondingly paid less with fewer benefits. The experience in several West African countries shows that there are many people willing to take these jobs (a recent announcement in Senegal generated 30,000 applicants for 1,000 positions); even if they are less qualified, the evidence on student performance is mixed; and, over time, these contractual workers have come to dominate the public service, as in Benin.

The political power of teachers' unions or the local (bureaucratic or political) capture of public funds can be countered if citizens have the information to lobby for a better mix of inputs or for making sure that budget allocations are actually received. The Uganda case illustrates the impact that collection and dissemination of quantitative data can have as a tool to mobilize "voice" (Hirschman 1970). Complaints about services based on isolated experiences tend to be brushed aside as anecdotal or at best partial evidence. But when systematic comparative data support public feedback, it is difficult to ignore and, as the Uganda case shows, it can provide a spark for public action. When evidence of the degree of leakage became public knowledge in Uganda, the central government enacted a number of changes: it began publishing the monthly transfers of public funds to the districts in newspapers, broadcasting information on the transfers on radio, and requiring primary schools to post information on inflows of funds. The objective of this "information campaign" was to promote transparency and increase public sector accountability in two different ways. First, the central government signaled that it had more information on local governments' actions than was the case previously. Second, by giving citizens access to information on the capitation grant program for primary schools, they empowered schools and citizens to monitor and challenge abuses of the system. Initial (internal) assessments of these reforms a few years later show that the flow of funds improved dramatically (Republic of Uganda 2000, 2001).

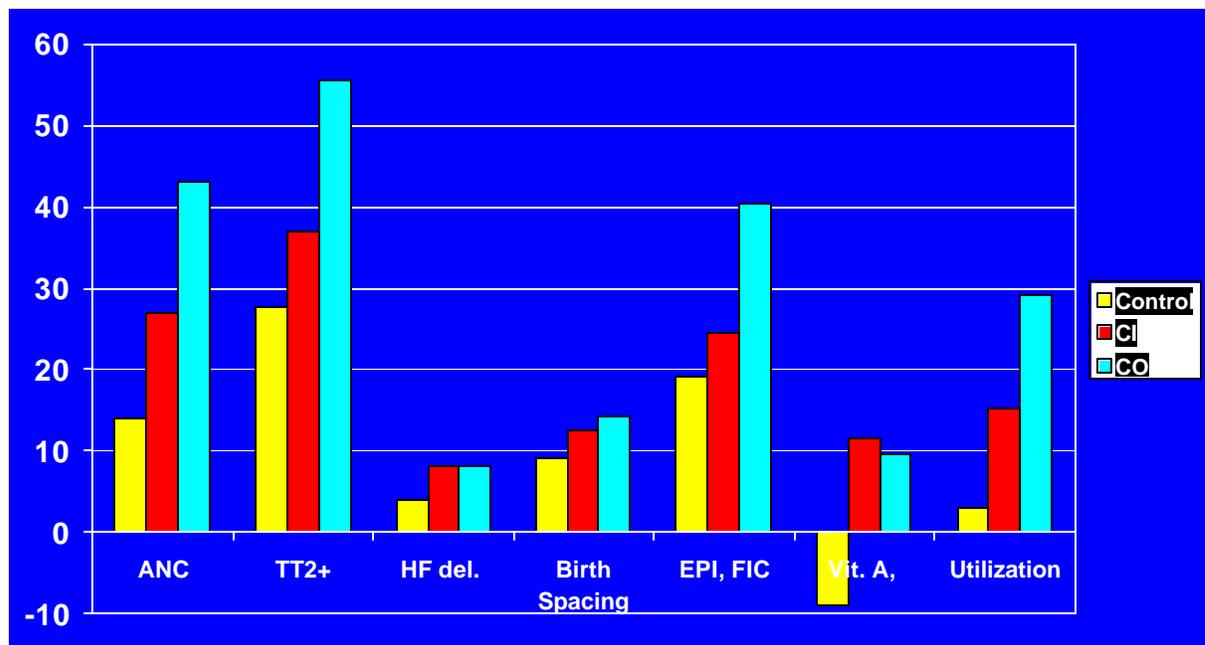
Third, even if the mix of current and capital spending is about right, because these services are transaction-intensive, *people* have to make services work (Pritchett and Woolcock 2002). Many of the problems confronting service delivery have to do with the incentives facing service providers. First, many of these services require skilled personnel—qualified doctors, trained teachers, etc. Not only are many countries short of these skills, but the remuneration and working conditions, especially in remote rural areas, makes it difficult to get qualified people to work there. The vacancy rate for clinics in Kalimantan, Indonesia is almost 80 percent, whereas in Bali or Jakarta it is less than two percent.

More fundamentally, effective service delivery involves more than just being able to hire skilled staff. It requires that they show up for work, and perform their duties in a reasonable fashion. This is probably the biggest constraint to making services work for

poor people. Since the delivery of the service is poorly monitored (if at all), the service provider does not feel accountable. Typically, he is an employee of the central government, which sends him a paycheck regardless of whether he performs his functions. The symptoms of this problem are everywhere (absenteeism in schools, nurses hitting mothers during childbirth, drunk teachers, etc.). Many governments have tried to address this problem by contracting out the services to NGOs or private organizations, who are then held accountable for performing the contract. Four examples illustrate this point.

In Cambodia, where 30 years of civil war had depleted the country’s physical and human health infrastructure, the government introduced a program of contracting with NGOs to manage district health services (Bhushan, Keller, and Schwartz 2002). They introduced two types of contracting: contracting out (CO), where the NGO can hire and fire staff, set wages and procure drugs on their own; and contracting in (CI), where the NGO managed the district from within the Ministry of Health, they could not hire and fire staff (although they could transfer them), and they had to obtain drugs from the government. The twelve districts (with populations ranging from 100,000 to 180,000) were randomly assigned to CO, CI or the standard government management, the control/comparison group (CC). A before-and-after survey of both households and health facilities (carried out by a third party) revealed a clear pattern: Districts that contracted out registered the biggest improvement, with those contracting in next, and the control group last (Figure 2).

**Figure 2. Relative Performance of NGO Contracting Schemes in Cambodia**  
(Percentage increase from baseline of different health indicators)



Source: Bhushan, Keller, and Schwartz (2001).

The decade-long civil war in El Salvador left its education system, especially in the rural areas, in shambles. Recognizing the difficulty in getting urban teachers to serve

in these fairly remote areas, the government introduced the EDUCO program, whereby local community organizations, known as ACEs, could hire teachers on one-year renewable contracts, pay the teachers and manage a small fund for school supplies (Jimenez and Sawada 1999). Each ACE would have a contract with the Ministry of Education that set personnel guidelines, including criteria for hiring teachers. The ACEs would meet with all the parents once a month, and regularly visit the schools and teachers. The result has been that EDUCO is associated with an increase in net enrolment rates from 76 percent in the 1980s to 85 percent in 1995. More importantly, student and teacher absenteeism was significantly lower, and surveys attributed this to the greater community participation in the schools. Finally, there is evidence that EDUCO was also associated with an increase in student learning, with both math and language scores higher (although only the former was statistically significant).

In Burkina Faso, a seemingly dysfunctional health system and declining health indicators were turned around by a donor-financed project that required each health district to sign a contract with the Ministry of Health, based on district health plans that were prepared by district health teams and civil society (Vaillancourt 2002). Each district set targets based on performance indicators. The financial accounts of the districts were reviewed monthly, and the performance targets were monitored quarterly. The bank accounts of each district were replenished based on satisfactory reviews of their performance on both technical and financial-management grounds. After ten years of declining health indicators, the first year's review of the program showed improvements in vaccination rates, utilization rates of critical curative and preventive services (especially for mother and child health) and of family planning services. In addition, there has been a strengthening of management capacity, especially at the district level, in planning, budgeting, financial management and accounting, monitoring and evaluation, including the collection, analysis and utilization of data. There are signs of increasingly innovative behavior—the chief medical officer launched a baseline survey and a beneficiary assessment by contracting it out. Finally, all actors involved in the evaluation of the first year's performance attributed improvements in performance directly to the performance-based management system.

The municipality-run water and sanitation system in Cartagena, Colombia, was plagued with chronic inefficiency, excessive political interference, poor maintenance, poor service delivery, and weak commercial and financial management. To address these problems, the government decided to liquidate the water authority, and offer a contract for assuming responsibility for operations and maintenance as well as some of the new investment needed. A long-term (25 years) contract with performance criteria requiring improvements in service was signed with a Spanish water company. The result has been a substantial increase in the quality of water and sanitation services in Cartagena. All the performance indicators show a marked improvement. The number of water connections went up by almost 50 percent, continuity of service went from 7 hours per day to 24, and new connections in poor areas went up by 98 percent (Libhaber 2002a,b). Furthermore, customer waiting time at the service facility dropped by over half, from 30 minutes to 14 minutes. A similar concession in Cochabamba, Bolivia, however, had less favorable results. Three months into the contract, farmers were informed that their water tariffs were being increased significantly. Riots broke out and two people were killed by the

police. The government cancelled the contract, and the utility is now being managed by a users' association.

Finally, many governments have experimented with demand-side interventions, to address the fourth weak link in the chain. One example is the Female Secondary Scholarship Program in Bangladesh. Under this program, a girl gets a stipend, deposited directly into a bank account in her name, provided she can show that she is attending secondary school, maintaining passing grades and is unmarried. The school in turn will receive a transfer proportional to the number of girls enrolled. While the program has yet to be evaluated rigorously, preliminary estimates indicate that it has had a sizeable impact on secondary enrolment rates among Bangladeshi girls. Another, more celebrated example, is the PROGRESA program in Mexico, which has been extensively analyzed. This program gave cash transfers to families provided they regularly visit the clinic and send their children to school. Most of the analyses show significant improvements in health and education status of these poor families. However, we still do not know whether these improvements were due to the cash transfers per se, or to the fact they were conditional on clinic visits and school attendance.

### **III. Elements of a Framework for Analyzing Service Delivery**

The examples outlined above illustrate both the potential and the challenges in making services work for poor people. To understand the problem better, we now propose a simple framework for examining various ways of improving service delivery. Our starting point is that the service delivery chain is a series of principal-agent relationships. The organizational structure of public sector agencies involves multiple tiers of management and frontline workers. In addition, public services have multiple stakeholders. Multiplicity is also a characteristic of the tasks that need to be performed. Consequently, the output and actions of public services are often difficult to verify or measure. Although incentive theory—having been developed mainly to understand the firm—does not specifically address issues related to public service delivery, it provides a useful framework and testable hypotheses<sup>1</sup>.

Dixit (2000) gives an example of multi-tasking and multiple stakeholders in the context of public education. The multiple tasks include providing literacy and numeracy and other direct skills, supporting the emotional and physical growth of children, providing vocational skills and preparing pupils for working life, providing skills in health and financial management, instilling citizenship, overcoming the disadvantages of home life, and ensuring children can grow up in a violence-free environment. While these goals are not mutually exclusive, they compete for limited resources in the schools' production process, and, as mentioned earlier, it is often difficult to measure the output of each of these tasks.

Similarly, the diverse body of stakeholders in public education includes parents and children, teachers and their unions, taxpayers, potential graduate employers, society

---

<sup>1</sup>In the last few years, applications of this theory to the public sector have begun to emerge in the literature (for example, Dixit 2001, Burgess and Metcalfe 1999).

as a whole, private schools, and various groups favoring or opposing specific components of the curriculum. These principals have diverse preferences and objectives. Parents want “good education” and day care for their children, teachers and unions want higher pay, taxpayers want low costs, employers want vocational skills, society wants good citizens, and private schools compete for pupils and some public funds. Again, many of these objectives are mutually conflicting—for instance, taxpayers’ objective of low costs vis-à-vis the teachers’ and unions’ goal of having higher pay. And yet, teachers are often not interested in money alone but in challenging work and career prospects.

The existence of multiple principals reduces the agent’s incentives, because activities desired by the principals to realize their respective goals are often substitutes for each other (Bernheim and Whinston 1986; Holmström and Milgrom 1988; Dixit 1996, 1997; Martimort 1992; and Stole 1991). Similarly, when some task outcomes are verifiable and other are not, it may not be optimal to provide explicit incentives to any task as the agent would divert all effort from unverifiable to verifiable tasks. In education, for example, exam results would be disproportionately emphasized. Incentive schemes are most suitable when tasks are clearly defined and unambiguous, and become weak when neither outcomes nor actions are verifiable, such as in a typical government ministry. Public service providers also often lack competitors. While the introduction of competition does not in itself guarantee better performance, it places greater emphasis on other management devices.

Standard principal-agent theory also provides a framework for analyzing incentives of frontline workers. Health workers, for example, can be seen as agents for multiple principals, including patients, communities, and government agencies with responsibilities for the delivery of health services. In general, the challenge is to induce health workers to exert effort in a range of different areas: clinical tasks (diagnosis, treatment, follow-up, outreach activities, etc.), psycho-social interaction with patients, and administration and maintenance of hygienic standards. In addition, there is a need to restrain opportunistic behavior (such as absenteeism, overcharging, and petty corruption) by health workers. A sizeable literature has dealt with the incentive issues that arise due to the asymmetry of information between patients and providers.<sup>2</sup> A related literature has studied the effect of provider payment systems on the incentives and behavior of health workers.<sup>3</sup> Recently, the principles of agency theory have motivated reforms in public sector management, which emphasize performance measurement and incentives.<sup>4</sup> These efforts have tried to remedy a perceived lack of incentives in the public sector by introducing systems of rewards and sanctions in the form of “performance management systems.”

In sum, the link between public spending and outcomes is a complex web of multiple principal-agent relationships, with imperfect monitoring and sometimes unclear

---

<sup>2</sup> See Arrow (1963) for an early contribution.

<sup>3</sup> Chaiz-Couturier and others (2000) and Gosden and others (1999) discuss the effect of different forms of physician payment—capitation, shared financial risk, fee-for-service, and salary—on medical practice. See also Barnum, Kutzin, and Saxenian (1995) for a discussion of the effect on payment systems on hospital performance.

<sup>4</sup> For example, Goddard, Mannion, and Smith (2000), Martinez and Martineau (1998), and Mills (1997).

objectives. To cut into this problem, we suggest below that it is useful to distinguish among three important principal-agent relationships. These relationships are of course closely linked, but separating them allows us to probe deeper into each, and understand individual experiments or innovations in terms of which relationship they strengthen.

### *3.1 The Policymaker and the Service Provider*

Even when the policymaker is benevolent, she has the problem of ensuring that the service provider has the proper set of incentives to provide the service effectively. In the case when the service can be easily measured and therefore monitored, the policymaker may choose to write a contract with the service provider. This is more typically the case in water and sanitation, where you can specify the number of water connections and other monitorable performance indicators. As a result, such contracts are more common in water and sanitation than in education, say. The Cartegena water concession is a case in point. (The unsuccessful Cochabamba privatization failed for other reasons, not because the contracts were difficult to specify. We will turn to this case shortly). For the same reason, we find fewer private-sector concessions in education. In health, the possibility for contracting is always there, but it is often tailored to particular activities. Recall that the Cambodia example of contracting health services to NGOs was fairly carefully circumscribed (for instance, the contracting-in NGOs could not hire or fire workers).

Workers do not respond only to externally-imposed rewards and penalties; they are also driven by “intrinsic motivation” (Deci 1975) in the form of, for example, professional ethics or norms. Intrinsic motivation may be strong enough to result in a self-enforcing contract.<sup>5</sup> Some contributors have suggested that intrinsic motivation is more likely to arise and be sustained in certain types of organizations, so that NGOs or religious organizations, for example, are better able to overcome agency problems in the health sector (Glaeser and Shleifer 2001, Pauly 1987).

Intrinsic motivation has also been emphasized by a multidisciplinary literature that provides a more comprehensive picture of worker motivation. Franco, Bennett, and Kanfer (2002) propose a framework in which worker motivation has many and complex influences, including non-monetary factors. They highlight the deeply psychological and cultural nature of worker motivation, suggesting three classes of internal influences on motivation: (i) goals, motives, and values; (ii) self-concept and other self-related variables; and, (iii) cognitive expectations about the relationship between various actions and consequences. In addition, the organizational, and the social and cultural context influence motivation. This perspective on worker motivation presents a more complex picture, where the effect of policy changes, including a softening of financial incentives, are highly context-contingent. Drawing on the psychological and sociological literature on worker motivation, some contributors have suggested that intrinsic motivation is not

---

<sup>5</sup> Kreps (1997) has suggested that in many cases what is referred to as intrinsic incentives may in fact be workers' response to fuzzy extrinsic motivators such as fears of discharge or career concerns, but he also acknowledges that “true” intrinsic motivation may be an important factor in many contexts.

only an essential factor in resolving deep agency issues, but that increasing reliance on extrinsic incentives may serve to undermine internal sources of motivation.<sup>6</sup>

These issues raise a number of important conceptual, empirical, and methodological questions. For example, what is the relative importance of extrinsic and intrinsic motivation, and how do they interact? How do professional norms, commitment, or trust affect the motivation and behavior of health workers? How can we approach the measurement of intrinsic motivation and their impact on behavior? Is intrinsic motivation stronger or more important in certain types of organizations? There is currently little evidence on these issues, particularly for developing countries. Some research has tried to measure professional commitment through the use of self-administered questionnaires with a broad range of questions concerning the worker's level of identification with the organization (e.g., hospital) and its goals, willingness to exert effort on behalf of the organization, and general job satisfaction.<sup>7</sup>

It is also evident that there is a severe shortage of systematic evidence and lessons at the level of the service-providing unit, such as the clinic or the school. A new body of micro-level evidence from frontline service providers will include public, private not-for-profit, and private-for-profit sectors. A survey instrument, the Quantitative Service Delivery Survey (QSDS), is currently being designed and tested for that purpose.<sup>8</sup> In the same way that the firm is the unit of observation in enterprise surveys and the household in household surveys, the QSDS takes the frontline service facility or service provider, such as the health clinic or the school, as the principal unit of observation. It provides comparable micro data on the "service delivery climate" across countries. Furthermore, it is important to link the service-providing unit "downstream" to evidence from actual and potential users (through household surveys) and "upstream" to the public administration and political processes (through public officials surveys). This will allow us to analyze supply and demand factors jointly, as well as to bring political economy factors explicitly in the analysis.

### 3.2 *The Service Provider and the Client*

The second critical principal-agent relationship is that between the provider and the client. As many of the examples illustrate, the oversight and accountability roles of the client can often improve the delivery of the service. The EDUCO program in El Salvador showed how parents' associations or local communities, by visiting schools and monitoring teachers, could improve learning outcomes. Of course, the many cases when the client pays to obtain the services (such as user fees for certain health and education services) is a particular relationship between provider and client, and one which we have considerable experience in modeling. Demand-side interventions that provide cash transfers to clients to use in obtaining the service would also fall under this category

---

<sup>6</sup> For example, Segall (2000, p. 11) notes: "Market relationships present health care providers with perverse incentives and can do violence to the professional ethos of caring." See also Kreps (1997).

<sup>7</sup> See, for example, Bennet, Gzirishvili, and Kanfer (2000). See also Mowday and Steers (1979) for an early approach.

<sup>8</sup> Details on the QSDS surveys including questionnaires can be found on the World Bank Development Research Group ([econ.worldbank.org](http://econ.worldbank.org)). Public Services Research under "tools."

(although the decision of who gets the transfer depends on the underlying political economy—see below). In general, however, the relationship between service provider and client does not always lend itself to economic modeling. While game-theoretic models of community behavior have been developed, some types of community action arise spontaneously. Even if we cannot model it, this phenomenon needs to be studied and documented. To that end, these relationships are often examined in the context of experiments.

Policy experiments, such as the Cambodia example above, are an effective way to obtain micro-level evidence on service delivery and its impact. Evaluating programs by examining correlations of inputs and outcomes can sometimes be misleading. For instance, researchers might observe that schools with more textbooks typically have better educated children. However, the greater educational achievement might reflect other factors correlated with textbooks, such as income or parental interest in education, rather than being a direct causal effect of the textbooks. On the other hand, if compensatory programs provide textbooks to problem schools, then retrospective studies may underestimate the effect of these programs. One way to address these concerns is to conduct randomized prospective evaluations. Such prospective evaluations, with random assignment to treatment and comparison groups, revolutionized medicine, and they could have a similar impact in other fields. In several cases, field experiments have produced strikingly different results from retrospective econometric analyses of inputs and outcomes (LaLonde 1986, Miguel and Kremer 2001, Glewwe and others forthcoming).

In fields such as health and education, randomized evaluations are often feasible. For example, programs could be phased in over time with the order of phase-in determined randomly among suitable sites. The randomization would mean that areas treated early and later should be comparable aside from the effect of the program. Then the effects of the program can be measured directly, and the results will be transparent to policymakers. One example of this is the PROGRESA program in Mexico, where a subset of the villages was selected randomly for delayed implementation of the program. The success of PROGRESA is spawning similar programs in other countries. Other examples demonstrating the feasibility of conducting randomized evaluations include a study of school-based de-worming in Kenya and an evaluation of a school voucher program in Colombia (Miguel and Kremer 2001, Angrist and others forthcoming).

### 3.3 *The Client and Policymaker*

The third relationship is that between the client (or citizens in general) and the policymaker. The reason this relationship is important is because it is not always the case that the policymaker acts in a benevolent fashion. When policymakers maximize a different objective function than the welfare of the citizens, the citizens or clients can exercise various incentive mechanisms to change the policymaker's behavior. This is of course the realm of political economy, a vast field that we will not enter into here. However, one of the areas where this relationship becomes salient is when citizens or clients use voice to influence policymakers. The Uganda example of disseminating the information on leakage of funds had the effect of among other things, increasing citizens' voice on public-expenditure decisions. Political-economy considerations are also important in understanding why the incidence of public spending is not always pro-poor.

It is sometimes necessary to marshal support from the middle class in order to provide some support to the poor (Gelbach and Pritchett 2000).

There is in fact a fourth relationship that we have alluded to before: that between aid donors and policymakers. Because they provide financing for development, donors set certain requirements on how the money is to be used. This is of course part of any contract. What is perhaps less appreciated is that the nature of the contract between donor and policymaker affects the delivery of services between frontline provider and clients. Specifically, as mentioned earlier, the requirement by some donors that they only finance capital investments results in under-financing of recurrent expenditures, especially non-wage operations and maintenance, which especially in the health and education sectors, strongly influences expenditure outcomes. A second phenomenon is that donors often insist that the recipient country follow the donor's procedures in financial management and procurement. As a result, some countries have to comply with many different sets of procedures (typically one for each donor), using up their scarce administrative talent. In some cases, donors set up their own project implementation units, which draw away this scarce manpower from government, undermining financial management in the rest of the government. An important feature of the Burkina Faso district health program was that donors pooled their resources into a common fund, so that the district health agencies only had to comply with a single set of financial management procedures.

#### **IV. Concluding Remarks**

The framework outlined here provides a way to examine options for improving the outcome of public services for the poor. The different examples cited in section II all addressed, to different extents, the relationship between the policymaker and the service provider; the provider and the client; and the client and policymaker. In each case, they were able to improve outcomes by addressing a particular problem in the relationship, some as being able to monitor performance. To be sure, the real world is much more complicated than these simple examples and frameworks would suggest. Just as it may be difficult to transfer lessons from the water sector to education, so will it be foolhardy to expect that an innovation that worked in El Salvador will also work in Ethiopia.

Furthermore, the examples and framework cited here only deal with the problem of designing and implementing a program to improve service delivery. Difficult as that may be, it leaves out at least two other important issues. The first is the transition to the new system. As the Cochabamba and Cartegena examples show, more or less the same program to privatize water could have dramatically different consequences because of the way in which the change was introduced. In Cochabamba, tariffs were raised almost immediately, undermining support for the reform. More generally, our framework does not address the question of how these innovations come about. In many cases, they were spontaneous, arising out of particularly difficult situations or inspired by a visionary leader. They almost never occurred as a result of a well-thought-out, long-term plan. We need to understand better the process by which these changes happen if we are to help countries with dysfunctional service delivery systems improve.

The second issue that has been left out is the sustainability of these changes. An innovation such as contracting out health services to NGOs or community oversight of schools may yield significant results in the near-term. But can it be sustained in the long-

run? Even if these improvements help countries reach the Millennium Development Goals, what happens after 2015? For some of the innovations cited here, the question is already being asked. For example, the Bangladesh secondary school scholarship program for girls, while it appears to have helped secondary enrolment among girls, may also turn into an entitlement program that the government cannot afford. How will these programs be designed so that their effects will continue to be felt in the long-run, without undermining the public budget?

While these questions may seem overwhelming, we cannot neglect them. The world is in a period of unusual ambition and commitment toward poverty reduction. The ambition is reflected in the Millennium Development Goals; the commitment in the recent increase in foreign aid based on improved policies and institutions in developing countries. For the ambition and commitment to be fulfilled, we have to make exceptional progress, especially in the human-development areas, because we are even further off on those targets than in some other areas. With additional resources and reasonably good, growth-promoting policies in place, we need to focus on the remaining major challenge—making services work for poor people.

## References

*Note:* The word “processed” describes informally reproduced works that may not be commonly available through library systems.

- Angrist, Joshua D., Eric Bettinger, Erik Bloom, Elizabeth King, and Michael Kremer. “Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment.” *American Economic Review*, forthcoming.
- Appleton, Simon. 2001. “What Can Expect from Universal Primary Education?” In Ritva Reinikka and Paul Colliers, eds., *Uganda’s Recovery: The Role of Farms, Firms, and Government*. Sectoral Studies Series. World Bank: Washington, D.C.
- Arrow, K. J. 1963. “Uncertainty and the Welfare Economics of Medical Care.” *American Economic Review*.
- Barnum, H. N., J. Kutzin, and H. Saxenian. 1995. “Incentives and Provider Payment Methods.” *International Journal of Health Planning and Management* 10: 23-45.
- Bennet, S., D. Gzirishvili, and R. Kanfer. 2000. “An In-depth Analysis of the Determinants and Consequences of Worker Motivation in Two Hospitals in Tbilisi, Georgia.” Major Applied Research 5, Working Paper 9. Partnerships for Health Reform. <http://www.phrproject.com/publicat/arp/mar5wp9ab.htm>
- Bernheim, B. Douglas, and Micheal D. Whinston. 1986. “Common Agency.” *Econometrica* 54(4, July): 923–42.
- Bhushan, Indu, Sheryl Keller and Brad Schwartz. 2002. “Achieving the Twin Objectives of Efficiency and Equity: Contracting for Health Services in Cambodia.” Asian Development Bank, Policy Brief Series No. 6.
- Burgess, Simon, and Paul Metcalfe. 1999. “Incentives in Organisations: A Selective Overview of the Literature with Application to the Public Sector.” CMPO Working Paper 00/16. Leverhulme Center for Market and Public Organisation, University of Bristol, United Kingdom. <http://www.bris.ac.uk/cmpo/>
- Burnett, Nicholas, and Raja Bentaouet Kattan. 2002. “User Fees in Primary Education.” Processed.
- Castro-Leal, J., L. Dayton, L. Demery and K. Mehra. 1999. “Public Spending in Africa: Do the Poor Benefit?” *World Bank Research Observer* 14(1): 49-72.
- Deci, E. L. 1975. *Intrinsic Motivation*. New York: Plenum Press.
- Devarajan, Shantayanan, Margaret J. Miller, and Eric L. Swanson. 2002. “Goals for Development: History, Prospects, and Costs.” Policy Research Working Paper 2819. World Bank, Washington, D.C. <http://econ.worldbank.org/view.php?type=5&id=13269>
- Devarajan, Shantayanan. 2001. “Growth Is Not Enough.” World Bank, Washington, D.C. Processed.
- Dixit, Avinash. 2001. “Incentives and Organizations in the Public Sector: An Interpretative Review.” Processed.

- Dixit, Avinash. 2000. "Incentives and Organizations in the Public Sector: An Interpretative Review." Revised version of paper presented at the National Academy of Sciences conference on *Devising Incentives to Promote Human Capital*, Irvine, California, December 17-18. Princeton University. Processed.
- Dixit, Avinash. 1997. "Power of Incentives in Public Versus Private Organizations." *American Economic Review Papers and Proceedings* 87(2, May): 378-82.
- Dixit, Avinash. 1996. *The Making of Economic Policy: A Transaction-cost Politics Perspective*, Cambridge, Mass.: MIT Press.
- Filmer, Deon. 2001. "A Note on Public Spending and Health and Education Outcomes," Development Research Group, World Bank, Washington, D.C. Processed.
- Filmer, Deon, Jeffrey S. Hammer, and Lant H. Pritchett. 2000. "Weak Links in the Chain: A Diagnosis of Health Policy in Poor Countries." *World Bank Research Observer* 15(2): 199-224.
- Franco, L. M., S. Bennett, and R. Kanfer. 2002. "Health sector reform and public sector health worker motivation: a conceptual framework." *Social Science and Medicine* 54: 1255-66.
- Gelbach, Jonah B., and Lant Pritchett. 2000. "Indicator targeting in a political economy: leakier can be better." *Journal of Policy Reform* 4(2): 113-45.
- Glaeser, E. L., and A. Shleifer. 2001. "Not-for-profit entrepreneurs." *Journal of Public Economics* 81: 99-115.
- Glewwe, Paul, Michael Kremer, Sylvie Moulin, and Eric Zitzewitz. "Retrospective vs. Prospective Analyses of School Inputs: The Case of Flip Charts in Kenya." *Journal of Development Economics*, forthcoming.
- Goddard, M., R. Mannion, and P. Smith. 2000. "Enhancing Performance in Health Care: Theoretical Perspectives on Agency and the Role of Information." *Health Economics* 9: 95-107.
- Hammer, Jeffrey, Ijaz Nabi, and James Cercone. 1995. "Distributional Effects of Social Sector Expenditures in Malaysia, 1974 to 1989." In Dominique van de Walle and Kimberly Nead, eds., *Public Spending and the Poor*. Baltimore: Johns Hopkins Press.
- Hirschman, A. O. 1970. *Exit, voice, and loyalty: Response to decline in firms, organizations, and states*. Cambridge, Mass.: Harvard University.
- Holmstrom, Bengt R., and Paul R. Milgrom. 1988. "Common Agency and Exclusive Dealing." Yale School of Management, Conn. Processed.
- Jimenez, Emmanuel, and Yasuyuki Sawada. 1999. "Do Community-Managed Schools Work? An Evaluation of El Salvador's EDUCO Program." *World Bank Economic Review* 13(3, September).
- Jimenez, Emmanuel. 1987. *Pricing Policy in the Social Sector: Cost Recovery for Education and Health in Developing Countries*. Baltimore, Maryland: Johns Hopkins University Press.
- Kremer, Michael, Sylvie Moulin, and Robert Namunyu. 2002. "The Political Economy of School Finance in Kenya." Harvard University. Processed.

- Kreps, D. M. 1997. "Intrinsic Motivation and Extrinsic Incentives." *American Economic Review* 87(2): 359-64.
- LaLonde, Robert J. 1986. "Evaluating the Econometric Evaluations of Training Programs with Experimental Data." *American Economic Review* 76(4, September): 604-20.
- Libhaber, Menahem. 2002a. "Public-Private Partnership: Institutional Transformation Experience in the Water Supply Utility of Cartagena." Prepared for Water Sector Board, December 2001, and presented at World Bank Empowerment Retreat, May 7-8, 2002.
- Libhaber, Menahem. 2002b. "Concession of the Water and Sewerage Services: A Forecasted Failure in Cochabamba, Bolivia." World Bank Empowerment Retreat Powerpoint Presentation, May 7-8, 2002.
- Litvack, Jennie, and Claude Bodart. 1993. "User Fees Plus Quality Equals Improved Access to Health Care." *Social Science and Medicine* 37(3): 369-83.
- Martimort, D. 1992. "Multi-Principaux avec Anti-Selection." *Annales d' Economie et de Statistique* 28: 1-37.
- Martinez, J., and T. Martineau. 1998. "Rethinking human resources: an agenda for the millennium." *Health Policy Plan* 13(4): 345-58.
- Miguel, Edward, and Michael Kremer. 2001. "Worms: Education and Health Externalities in Kenya." NBER Working Paper 8481 (September). National Bureau of Economic Research, Cambridge, Mass.
- Mills, A. 1997. "Improving the Efficiency of Public Sector Health Services in Developing Countries: Bureaucratic versus Market Approaches." In Colclough ed., *Marketizing education and health in developing countries: Miracle or mirage?* Oxford and New York: Oxford University Press.
- Mowday, R., and R. M. Steers. 1979. "The measurement of organizational commitment." *Journal of Vocational Behavior* 14: 224-47.
- Pauly, M. V. 1987. "Nonprofit Firms in Medical Markets." *American Economic Review* 77(2): 257-62.
- Pritchett, Lant, and Michael Woolcock. 2002. "Solutions when *the* Solution is the Problem: Arraying the Disarray in Development." Kennedy School of Government, Harvard University. Processed.
- Pritchett, Lant, and Lawrence H. Summers. 1996. "Wealthier is Healthier." *Journal of Human Resources* 31(4):841-68.
- Reddy, Sanjay, and Jan Vandermoortele. 1996. "User Financing of Basic Social Services." United Nations Children's Fund, New York.
- Reinikka, Ritva, and Jakob Svensson. "Assessing Frontline Service Delivery." In T. Addison, H. Hansen, and F. Tarp, eds. *Debt Relief*. World Institute for Development Economics Research (WIDER), forthcoming 2002.
- Reinikka, Ritva, and Jakob Svensson. 2001. "Explaining Leakage in Public Funds." Policy Research Paper 2709. World Bank, Washington, D.C.  
<http://econ.worldbank.org/search.php?term=2709&sp=&st=&scope=0>

- Republic of Uganda. 2001. "Study to Track Use of and Accountability of UPE Capitation Grants." Ministry of Education and Sports. Report by International Development Consultants Ltd (IDC), Kampala, Uganda, October.
- Republic of Uganda. 2000. "Tracking the Flow of and Accountability for UPE Funds." Ministry of Education and Sports. Report by International Development Consultants Ltd, Kampala, Uganda, February.
- Sahn, David and David Stifel. 2002. "Progress Towards the Millennium Development Goals in Africa." *World Development*, forthcoming.
- Schultz, T. Paul. 1987. "School Expenditures and Enrollments, 1960-1980: The Effects of Income, Prices and Population Growth." In D. Gale Johnson and R. Lee, eds., *Population Growth and Economic Development*. Madison: University of Wisconsin Press.
- Segall, M. 2000. "Human Development Challenges for Health Care Reform." In P. Ferrinho and W. Van Lerberghe, eds., *Providing Health Care Under Adverse Conditions: Health Personnel Performance and Individual Coping Strategies*. Antwerpen: ITGPress.
- Stole, L. 1991. "Mechanism Design Under Common Agency." University of Chicago, Graduate School of Business. Processed.
- Vaillancourt, Denise. 2002. "Burkina Faso Health and Nutrition Project: Project Restructuring." World Bank. Processed.
- World Bank. 1997. *The State in a Changing World*. World Development Report. Washington, D.C.
- World Bank. 2001. "India: Raising the Sights: Better Health Systems for India's Poor." Report No. 22304. Health, Nutrition, Population Sector Unit, South Asia Region. Washington, D.C. May 28, 2001.
- World Bank. 2002. *World Development Indicators 2002*. Washington, D.C..

July 23, 2002