

CHAPTER 5

Expanding Poor People's Assets and Tackling Inequalities

Lacking assets is both a cause and an outcome of poverty. Poor health, deficient skills, scant access to basic services, and the humiliations of social exclusion reflect deprivations in personal, public, and social assets. Human, physical, and natural assets also lie at the core of whether an individual, household, or group lives in poverty—or escapes it. These assets interact with market and social opportunities to generate income, a better quality of life, and a sense of psychological well-being. Assets are also central to coping with shocks and reducing the vulnerability that is a constant feature of poverty.

Assets and their synergies

If we get a road we would get everything else: community center, employment, post office, water, telephone.

—Young woman in a discussion group,
Little Bay, Jamaica

Poor people have few assets in part because they live in poor countries or in poor areas within countries. They

also lack assets because of stark inequalities in the distribution of wealth and the benefits of public action. In Bolivia the under-five mortality rate of the poorest 20 percent of the population is more than four times that of the richest 20 percent.¹ In West and Central Africa the rich-poor gap in school enrollment ranges from 19 percentage points in Ghana to almost 52 percentage points in Senegal.² And in Ecuador 75 percent of households among the poorest fifth lack piped water, compared with 12 percent among the richest fifth.³ Poor women and members of disadvantaged ethnic or racial groups may lack assets because of discrimination in the law or customary practices. Low assets and low income are mutually reinforcing: low education translates into low income, which translates into poor health and reduced educational opportunities for the next generation.

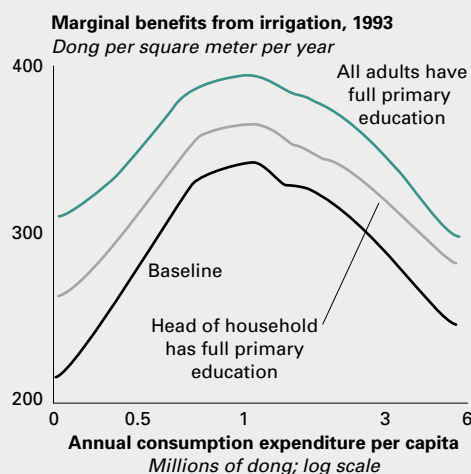
There are powerful complementarities across assets—the benefits of one asset can depend crucially on access to another. The synergies between human capital assets—such as a mother's education and her offspring's nutrition levels—are well documented. In Vietnam

Box 5.1 Interactions between human and physical capital

A study of irrigation infrastructure in Vietnam uncovered important complementarities between education and the gains from irrigation. The study tried to explain differences in farm profits as a function of irrigated and nonirrigated land allocations with controls for the observed factors that determined the administrative land allocations to households on decollectivization. Assuming that placement of irrigation is not based on expected rates of return, the results suggest that households with high levels of primary schooling benefit most from irrigation. The figure shows how the marginal benefits from irrigation would vary across per capita consumption expenditures if there were no differences in the education levels of adults across households. The baseline shows the gains at actual levels of education and compares those with the simulated amounts that would result if each head of household had the maximum five years of primary education—or if all adults had the full five years. More education raises the returns to irrigation, and the effect is particularly strong for the poor, who tend to have the least education.

Lack of irrigation infrastructure is only one of the constraints to reducing rural poverty in Vietnam. But the full returns from irrigation investments will not be realized without concomitant investments in education.

Irrigation delivers greater benefits to better-educated households in Vietnam



research found that households with higher education levels had higher returns to irrigation, with the largest benefits going to the poor (box 5.1).⁴ In rural Philippines electrification was estimated to increase the returns to education

Box 5.2 Links between the environment and health

There are many critical interactions between the environment and poverty. Among the best documented is the link between the environment and the health of poor people. Pollution—dirty water and air—is a major contributor to diarrhea and respiratory infections, the two most frequent causes of death for poor children.

Research has consistently shown that improving drinking water has less pronounced health benefits than improving sanitation. But the benefits from cleaner water are enhanced when sanitation is improved and water quantity is optimal. When hygiene is also improved, increasing the quantity of water does more to improve health than improving its quality. Education on hygiene is often necessary, though, before communities realize its potential health benefits.

A study of 144 water and sanitation projects found that improved water and sanitation services were associated with a median reduction of 22 percent in the incidence of diarrhea and 65 percent in deaths from diarrhea. But improved excreta disposal and hand washing can reduce under-five mortality rates by 60 percent and cases of schistosomiasis by 77 percent, of intestinal worms by 29 percent, and of trachoma by 27–50 percent. Other work has found significant relationships between air quality and health.

These critical interactions between the environment and health highlight the importance of working across sectors to improve poverty outcomes.

Source: World Bank forthcoming b; Klees, Godinho, and Lawson-Doe 1999.

by 15 percent.⁵ In Morocco places with better rural roads also have much higher girls' primary school enrollment rates and twice the use of health care facilities.⁶

Another important example of the interactions between assets lies in the influence of the environment on health (box 5.2). Such interactions suggest that poor health indicators in an urban slum, for example, may not be significantly improved by a local health center without the benefits of an effective sewage system. Increasing human well-being is thus likely to require action to simultaneously expand complementary assets.

Public action to facilitate the accumulation of assets

Poor people are central agents in building their assets. Parents nurture, care for, socialize, teach skills to, and help finance the education of their children. Small farmers invest in their land and livestock, while the self-employed

invest in materials, equipment, and market contacts important to their business. Workers migrate to cities and to other countries, and their remittances are often used to invest in household assets. Poor women and men save in housing, in rotating savings and credit societies, and (where available) in local banks and credit associations. Still, the scope for asset accumulation by poor households is severely constrained by inadequacies in the markets they face and by weaknesses in public and private institutions for service delivery. It is also constrained by lack of income, with poor people suffering severe handicaps in financing health, education, and other asset-related investments.

Why does the state have a role in expanding poor people's assets? For two basic reasons. First, markets do not work well for poor people, because of their physical isolation and because of market failures in the financial, health, and insurance sectors, for example. Second, public policy can reduce initial inequalities and increase the opportunities for poor people to benefit from growth.

Equity and efficiency considerations can be largely independent, but they generally overlap. Poor people, faced with a failure of a private market, can be left with only the state to provide services. While both the poor and the nonpoor will seek alternative solutions, the nonpoor have more resources at their disposal and so will clearly have more options. Among the most effective antipoverty policies are those that achieve more equity through redistribution and simultaneously enhance the efficiency of markets used by poor people (box 5.3, see also box 3.8 in chapter 3).

While there is a case for state involvement in expanding poor people's assets, there is no guarantee that the state will be effective. Ineffective state action and unsatisfactory human outcomes partly reflect the fact that government can influence only a few of the multiple sources of well-being. But they also reflect the difficulty many governments have in delivering goods and services. Governments are constrained by the fiscal resources at their disposal and their administrative capacity to deliver services effectively. Also, even if they have the resources and the capacity, state institutions may not be responsive to the needs of poor people.

How can public action enable poor people to expand their assets, and how can it tackle asset inequalities? In three complementary ways. By using the power of the state to redistribute resources, especially in services that create assets, such as education, health, and infrastructure. By implementing policy and institutional reforms to ensure effective delivery of services. And by engaging poor

Box 5.3 Win-win policies in the health sector

The combined objectives of greater equity and efficiency are easier to achieve in some programs than in others, as illustrated in the following two examples from the health sector.

Some health services, such as mosquito and other pest control and health education on basic hygiene and nutrition, are pure public goods. Others, such as combating infectious diseases, have clear positive externalities. Still others, such as curative care for noninfectious conditions, are private goods. Governments are responsible for infectious disease control on efficiency grounds. But such policies have important equity benefits as well. While the poor suffer more from almost all diseases than the nonpoor do, the difference is greatest for infectious diseases. In India the poorest tenth of the population is seven times as likely to suffer from tuberculosis as the richest tenth.

The general inadequacy, if not total absence, of health insurance markets in most developing countries exposes both the poor and the nonpoor to substantial financial risk and insecurity (chapter 8). (The systemic reasons for this failure were originally discussed in detail by Arrow 1963.) While public provision of insurance is one policy option, managing such programs is not easy. A common way of addressing the insurance problem is to subsidize expensive care, usually through public hospitals. But on equity grounds, the value of subsidizing hospitals is not as clear as that of attacking infectious disease. Hospitals are usually in urban areas, and the nonpoor end up benefiting more from the subsidies. Subsidized provision of essential hospital care can enhance equity as well as efficiency. But it will be a win-win policy—enhancing both equity and the efficiency of markets used by poor people—only if poor people can effectively access hospital care, and that poses a significant challenge.

Source: Hammer 1997; Devarajan and Hammer 1998; World Bank 1998t.

households and poor communities in decisions on the choice, operation, monitoring, and evaluation of programs and services that build their assets.

The rest of this chapter focuses on these three principles, with examples from different asset categories. It then discusses the important complementarities in setting priorities across areas of action, using land reform and the provision of urban water and sanitation services as illustrations. (Expanding access to financial assets is dealt with in chapter 4. Mechanisms to improve the accountability and responsiveness of state institutions are the focus of chapter 6. How to build social assets is covered in chapter 7. Using assets and protecting the assets of poor people during adverse shocks are discussed in chapters 8

and 9. And the role of the international community in asset building is covered in chapters 10 and 11.)

Redistributing public spending

The coercive power of the state can be a potent force supporting asset formation by poor people. But there are clear bounds to state action. In today's globally integrated world intrusive state action can undercut the functioning of markets and the incentives for private investment—killing job opportunities, not creating them.

In some instances there are significant tradeoffs between efficiency and equity. States generally mirror the unequal political structure they are founded on, and government action often reflects this. Coercive land reform under highly unequal land ownership, while potentially good for poor people and good for efficiency, rarely has enough political support to be effectively implemented. Nationalizing industrial assets is rarely good for poor people (who do not enjoy the benefits) and can damage efficiency. But there are many other instances in which addressing asset inequality can enhance efficiency and be

good for growth (see box 3.8 in chapter 3). The outcomes of redistributive policies for equity and for efficiency and growth thus need to be carefully evaluated.

The most important domain for state action in building the assets of poor people is the budget. Evidence suggests, for example, that public spending on education and health is not progressive but is frequently regressive (tables 5.1 and 5.2). This is also an area where redistribution is technically feasible and where tradeoffs between redistribution and aggregate growth may be low or negative (indeed, growth can be spurred). But tradeoffs also arise in choosing between competing redistributive actions on which public funds could be spent. The choice has to be guided by an assessment of the relative effectiveness of different instruments in realizing the objectives of redistribution and poverty reduction.

Budgetary action in support of asset redistribution requires two things. The first is a willingness and capacity to raise adequate revenues and devote a significant share of those revenues to development (not to military spending, subsidies to the nonpoor and to loss-making public enterprises, or illicit transfers to foreign bank accounts). The second is

Table 5.1
Public spending on education by income quintile in selected developing countries, various years
Percent

Country	Year	Quintile				
		1 (poorest)	2	3	4	5 (richest)
Armenia	1996	7	17	22	25	29
Côte d'Ivoire	1995	14	17	17	17	35
Ecuador	1998	11	16	21	27	26
Ghana	1992	16	21	21	21	21
Guinea ^a	1994	9	13	21	30	27
Jamaica	1992	18	19	20	21	22
Kazakhstan	1996	8	16	23	27	26
Kenya	1992/93	17	20	21	22	21
Kyrgyz Republic	1993	14	17	18	24	27
Madagascar	1993/94	8	15	14	21	41
Malawi	1994/95	16	19	20	20	25
Morocco	1998/99	12	17	23	24	24
Nepal	1996	11	12	14	18	46
Nicaragua	1993	9	12	16	24	40
Pakistan	1991	14	17	19	21	29
Panama	1997	20	19	20	24	18
Peru	1994	15	19	22	23	22
Romania	1994	24	22	21	19	15
South Africa	1993	21	19	17	20	23
Tanzania	1993	13	16	16	16	38
Vietnam	1993	12	16	17	19	35

a. Includes only primary and secondary education.

Source: Li, Steel, and Glewwe 1999; World Bank 1997i (for Romania), 2000f (for Ecuador).

Table 5.2
Public spending on health by income quintile in selected developing countries, various years
 Percent

Country	Year	Quintile				
		1 (poorest)	2	3	4	5 (richest)
Argentina	1991	33		60 ^a		6
Brazil	1990	8	18	30	25	20
Bulgaria	1995	13	16	21	26	25
Chile	1982	22		66 ^a		11
Ghana	1994	12	15	19	21	33
Indonesia	1987	12	14	19	27	29
Kenya	1992	14	17	22	22	24
Malaysia	1989	29		60 ^a		11
Mongolia	1995	18	20	19	19	24
South Africa	1993	16		66 ^a		17
Uruguay ^b	1989	37	21	17	14	11
Vietnam	1993	12	16	21	22	29

a. Distribution across these quintiles not distinguished in original source.

b. Quintiles defined by households rather than individuals.

Source: Filmer and Pritchett 1999b.

the allocation and management of development spending to support asset formation for poor people—especially human and infrastructure assets. Increasing transparency in budgets at both the national and the local level can reveal the extent to which public resources are used in a pro-poor manner and can improve local accountability (chapter 6).

Public financing of services is a core element of poverty reduction policy and practice. Experience suggests two lessons. First, higher public spending on social services and infrastructure may not translate into more or better services for poor people because programs for poor people are too often of low quality and unresponsive to their needs, and because the incidence of public expenditures is often regressive. However, subsidies to the nonpoor cannot be fully avoided because gaining political support for quality programs may sometimes require providing services to a broader segment of the population than just the poor alone. Second, it is important to use public resources to relax demand-side constraints. Even when health, education, and infrastructure services are publicly financed, poor people face constraints that limit their ability to benefit from them (for example, complementary costs, such as transportation to medical care).

Raising resources and making public spending pro-poor

As just noted, effective public redistribution requires a willingness and capacity to raise revenues, especially from the

nonpoor. In middle-income developing countries with high inequality, the nonpoor are often reluctant to contribute their fair share. Unblocking this resistance requires actions to build pro-poor coalitions (chapter 6). Low-income countries have the added problem of low public revenues: in 1997 government revenues in these countries averaged about 17.5 percent of GDP (excluding China and India).⁷ Compare that with around 29.6 percent for high-income countries.

One reason for the disparity is the high cost of raising revenues in poor countries, costs that sometimes outweigh the benefits of public spending.⁸ This in turn is explained by a combination of factors: a narrow tax base, high (and distorting) tax rates, weak tax administration, and poor public sector governance. So the payoff from tax reforms that seek to broaden the base, lower rates, and strengthen revenue collection (often by contracting it out to the private sector) can be substantial, making additional resources available for effective redistribution. In unequal societies, making tax collection as progressive as possible without seriously compromising efficiency is also desirable. For example, inheritance and real estate taxes could be very progressive.

Often, however, the real problem is that the limited public resources are not spent on activities—such as education, health, slum upgrading, and rural development—that help poor people accumulate assets. Part of the reason is that many low-income countries are simply

spending too much on other areas, such as debt service, subsidies to the nonpoor, loss-making or inefficient public enterprises, and the military. In the heavily indebted poor countries more than a fifth of public funds goes to debt repayments.⁹ Six heavily indebted poor countries in Africa spend more than a third of their national budgets on debt service and less than a tenth on basic social services.¹⁰ Niger spends more than twice as much servicing debt as it does providing primary health care. For several other low-income countries, debt service is not the constraint because they are not meeting their debt obligations. Still, debt levels and debt service obligations are unsustainable for several countries and incompatible with helping poor people accumulate assets.

Military spending in developing countries fell from 4.9 percent of GDP in 1990 to 2.4 percent in 1995.¹¹ In several countries this lower military spending permitted greater spending on health and higher education.¹² But in other countries—especially those experiencing armed conflicts or facing unresolved tensions with neighbors—military spending continues to cut into pro-poor spending. Many such countries have some of the worst health and education indicators in the world but spend more than twice as much on the military as on education and health combined. High military spending also has significant costs in lost opportunities for asset building. Beyond this crowding-out effect, the destruction of physical and social infrastructure and the slowdown in growth often associated with military conflicts further limit asset accumulation and poverty reduction (see box 3.2 in chapter 3).

Spending on the military and on broader security nevertheless has a role in development. The challenge is to inform budget allocation by making an intelligent assessment of the threats that a country faces. Better governance and transparency in managing military spending can help keep it in check.¹³ So can the peaceful resolution of ongoing or potential conflicts.

Between the mid-1980s and mid-1990s public spending on education and health increased in a large number of low-income countries, though slowly. For 118 developing and transition economies, real per capita spending increased on average by 0.7 percent a year for education and 1.3 percent a year for health. Such spending also rose as a share of total spending and national income.¹⁴ But allocating more funds to these sectors is not enough. To support asset accumulation by poor people, the distribution within sectors must favor basic services

used more by the poor and with the greatest market failures—typically not the case. For example, education and health resources go disproportionately to tertiary education and to hospital and curative care, used more by better-off groups.¹⁵

Several studies confirm that public resources favor the better-off. In Nepal the richest quintile receives four times as much public education spending as the poorest quintile (see table 5.1). In Ghana the richest quintile receives nearly three times the public health spending received by the poorest quintile (see table 5.2).¹⁶ Infrastructure spending also tends to disproportionately benefit wealthier groups.¹⁷ Subsidizing electricity in Croatia and water in Russia helps the rich much more than the poor.¹⁸ In Bangladesh infrastructure subsidies for the better-off are about six times those for the poor.¹⁹

Governments face important political issues in redistributing public spending to support asset accumulation by poor people. With finer targeting, public funds may in principle reach more poor people. But such targeting may lack political support from powerful groups that may lose out. Hence the importance of building pro-poor coalitions (chapter 6). This may require allocating some of the resources to actions and programs that also benefit the nonpoor.

Making public spending more pro-poor will involve reducing military spending and subsidies to the nonpoor. Privatizing loss-making or inefficient public enterprises releases resources that can potentially be used to address poor people's needs. Simplifying bureaucratic procedures reduces not only wasteful spending but the opportunities for corruption and diversion of resources to illicit activities as well. Prudent macroeconomic management can lower debt payments and make space for pro-poor spending. Periodic reviews of overall public expenditure outcomes can shed light on how efficiently public resources are used and how well they benefit poor people (see box 9.2 in chapter 9).

For the poorest countries, domestic actions will not suffice. These actions will have to be complemented by efforts from the international community to bring about debt relief and expand government resource bases through development cooperation (chapter 11).

Providing services and targeting subsidies

Public spending can provide services directly to poor people—through the construction of roads, schools, health clinics, or water supply schemes. But redistribu-

tion can also be achieved by relaxing demand-side constraints for poor people by subsidizing the consumption of privately provided services and covering complementary and opportunity costs. The *Voices of the Poor* study shows how the cost of services can prevent poor households from obtaining them (box 5.4).

Case studies confirm the cost constraints that poor people face in accumulating a wide range of assets. In rural areas in the Kyrgyz Republic 45 percent of patients sold assets (produce or livestock) to pay for hospital care.²⁰ Indirect costs to households in forgone income from child labor or in household chores no longer performed by children who are in school can also be significant.²¹ In rural Madagascar, where access to water is poor, the high opportunity cost of girls' school attendance in time spent fetching water significantly reduces girls' education.²² In Uganda primary enrollment nearly doubled in the 1997/98 school year when the requirement that parents pay half the cost of school fees was lifted and parent-teacher association levies were banned.²³

Poor people often pay enormous amounts for infrastructure services. In Nouakchott, Mauritania, most low-

income households spend 14–20 percent of their budgets on water—costs reflecting the minimal water infrastructure and the higher cost of the small quantities poor people buy.²⁴ A cubic meter of water from private water vendors in Port-au-Prince, Haiti, costs 6–10 times as much as a cubic meter from the public water service.²⁵ Similarly, high connection costs prevent poor households from enjoying energy services.²⁶ In rural areas, connecting to an electricity grid can cost \$20–1,000.²⁷ In too many cases poor people simply do not have the choice of consuming cheaper water and energy from a commercial network.²⁸

Redistribution, by providing services for free or subsidizing their demand, can help poor people expand their assets. Free primary education for poor people is critical for expanding their human assets, especially for girls. Similarly, subsidizing prevention of infectious diseases and helping poor households finance the costs of catastrophic health episodes need to be key elements in strengthening poor people's health assets and reducing their vulnerability to health shocks (see box 5.3; chapter 8).

In both education and health services—even when they are provided for free—demand-side subsidies can help

Box 5.4 Locked out by health and education fees

Whether to seek medical treatment or education for their children presents agonizing choices for poor people. Among participants in the *Voices of the Poor* study, illness was the most frequent trigger of a slide into deeper poverty. Nha, a 26-year-old father in Vietnam, reported that he had had to sell four buffalo, a horse, and two pigs to pay for his daughter's operation. The operation failed to cure her, and the need for further treatment transformed his family from one of the most prosperous in the community to one of the poorest.

In Pakistan many households reported that they had borrowed large sums of money, sold assets, or removed a child from school at least once to cover medical costs. Said an old woman from Ghana, "If you don't have money today, your disease will take you to your grave."

Although the greatest fear for poor people is the risk of large hospital fees, illegal payments for primary care can also be painful. Corruption in health care is widely reported. Poor women from Madaripur, Bangladesh, said that the doctor in the government health care center ignored them, giving preferential treatment to patients wearing good clothes and to those who could afford side payments referred to as "visit fees." A study participant from Vares, Bosnia and Herzegovina, exclaimed, "Before, everyone could get health care. But now everyone just prays to God that they don't get sick because everywhere they just ask for money."

Difficulties with paying school fees and other costs associated with sending children to school are also widely reported. A mother from Millbank, Jamaica, explained that she could not send her six-year-old daughter to school because she could not afford the uniform and other costs. Another daughter had to drop out of school because the family could not afford the \$500 for school fees. The woman said, "My son will be ready for school in September but I can't see how I'll be able to send all three of them to school."

In some countries children are pulled out of school because fees are due when families can least afford them. In Ethiopia payments are due at the start of the school year in September, a time of two important festivals and the harvest. Amadi, a 14-year-old boy in Nigeria, said that he had been in and out of school because his parents could not pay his school fees regularly and promptly. He missed his promotion exams several times and remains in primary school while others his age have gone on to secondary school.

In formerly centrally planned economies the cost of schooling is a serious concern for poor families because education was free in the past. People also reported problems with teachers soliciting bribes and special "tutoring fees" in exchange for passing grades and diplomas.

Source: Narayan, Chambers, Shah, and Petesch 2000; Narayan, Patel, Schafft, Rademacher, and Koch-Schulte 2000.

poor families invest further in the human capital of their children (to cover transport costs, for example). To increase access to education for girls or minority, indigenous, or poor children, public funds—in vouchers, stipends, scholarships, grants, and so on—are paid directly to individuals, institutions, and communities. In Bangladesh the government pays stipends covering 30–54 percent of direct school expenses for girls in grades 6–10. In Colombia in the past poor children received public vouchers to attend the secondary school of their choice. In Balochistan, Pakistan, community grants are provided for girls to attend community schools. These programs raise the demand for education among poor households. Mexico's Progresa,²⁹ for example, has boosted enrollments among beneficiaries compared with similar families not in the program (box 5.5).

An alternative to transfers is subsidies on the price of services. Few developing countries, however, have successfully implemented price discrimination in health services through sliding scale fees.³⁰ In most African countries such exemptions tend to benefit wealthier groups (such as civil servants).³¹ In Ghana's Volta Region in 1995 less than 1 percent of patients were exempt from health user fees, and 71 percent of exemptions went to health service staff.³² In Indonesia and Vietnam poor people can have user fees waived through an affidavit of indigence, but few people seem to take advantage of this—partly perhaps be-

cause of social stigma attached to declaring oneself indigent.³³ Sometimes private and nongovernmental providers are in a better position to implement sliding scales, since they frequently know their patients' background and have an incentive to charge what the market will bear.³⁴

For water and energy many developing countries use increasing block tariffs, charging a low tariff (often below cost) for the first block of consumption and rising tariffs for additional blocks. In Asia 20 of 32 urban water utilities use this tariff structure.³⁵ Such tariffs appear to be more equitable (since they force firms and wealthier consumers to subsidize consumption by poor households). They also discourage waste. But there are problems. In many developing countries few poor households are served by network utilities, and governments choose large initial consumption blocks, putting most of the financial benefit in the hands of middle- and upper-income consumers. Ironically, increasing block tariffs discriminate against poor households that share a water connection with several other households, because even if the consumption of each household is low, total consumption is high. In addition, tariffs charged to industries have often been so high that they choose to self-provide, undermining the financial viability of service providers.³⁶

Still, in countries where network access is high, a well-designed increasing block tariff can outperform cash transfers administered by poorly funded social protection offices, as in some countries in Eastern Europe and the former Soviet Union.³⁷ But in countries where poor households have limited access, the subsidy of choice should be support for a connection, not for consumption. One way to mitigate high connection costs is to extend credit to poor users.³⁸ Another is to subsidize all or part of the connection fee. Infrastructure subsidies can also be made more pro-poor if financed through the general budget or through industry levies in ways that are not discriminatory.³⁹ This approach, compatible with free entry, provides strong incentives to serve the poorest if the subsidy is paid to the provider only after service has been delivered.

How redistribution is best achieved through transfers and price subsidies varies with a government's ability to identify the poor and administer subsidies. If it is possible to identify poor people individually, any number of policies can help in redistribution. Direct cash payments, or the subsidy of any good at all, are fine if the benefits can be restricted to poor people alone. But it usually is not possible to tell precisely who is eligible, necessitating more indirect means (box 5.6).

Box 5.5 Mexico's Progresa: paying parents to send children to school

Mexico's Progresa, an integrated poverty reduction program initiated in 1997, subsidizes education, health care, and nutrition for poor rural households. It aims to reduce current poverty and increase investment in human capital, breaking intergenerational poverty. Progresa covers 2.6 million families—about 80 percent of the population in extreme poverty in rural areas.

Progresa provides grants to poor families for each child under 18 enrolled between the third grade of primary and the third grade of secondary school. The grants increase for higher grades and are slightly higher for girls than boys. For a child in the third year of secondary school, grants are equal to 46 percent of the average earnings of an agricultural worker. Families of children who miss more than 15 percent of the school days in a month do not receive the grant that month.

Progresa has pushed up enrollments at all levels, with the largest effect (17 percent) on the transition from sixth grade to the first year of secondary school (traditionally when many children drop out).

Source: IDB 2000.

Box 5.6 Some general principles on how to design subsidies

Even when poor people cannot be identified individually by administrative means, subsidies can be designed to reach the poor.

- *Self-targeting.* Programs can be designed to ensure “self-selection”—say, by paying wages below prevailing market rates. The Maharashtra Employment Guarantee Scheme in India relies on providing work that only poor people would find attractive (Ravallion 1999a; see box 8.9 in chapter 8).
- *Geographic targeting.* Subsidies can go to specific locations, so that rural and remote areas receive most of the benefits. This works best if the correlation between poverty and location is high—less well if poor and non-poor live close together. It also works best if the subsidy is attached to goods that are hard to transport, such as direct services in education and health.
- *Commodity targeting.* Subsidies should go to commodities that poor people consume proportionately more of than other people, ensuring that they will receive most of the subsidy. Food and primary education usually rank high on this criterion.

Pooling risk through insurance is another way to address cost constraints on demand for health care. Several middle-income countries are pursuing universal health insurance (chapter 8). Chile managed to reach the 15 percent of its population not covered by social insurance by creating a national health fund (Fonasa) that collects both payroll deductions for social insurance and a general revenue subsidy for health care. Still, public resources may be better spent and poor people may benefit more if governments focus on insuring against catastrophic health incidents—which most poor households are less able to finance.⁴⁰ Social insurance schemes, even when intended to be universal, frequently serve the better-off first, with poor people receiving coverage late. Indeed, before coverage becomes universal poor people may suffer—since the demand and prices for private care can increase as a result of the insurance program, as was the case in the Philippines.⁴¹

Institutional reforms for effective delivery: governance, markets, and competition

I heard rumors about assistance for the poor, but no one seems to know where it is.

—From a discussion group,
Tanjugrejo, Indonesia

Once countries have settled the political problem of how much should be redistributed and the more technical question of what is to be redistributed, the next step is to make sure that services do in fact reach the poor. How can poor people get effective delivery of the services they need to form assets? The old model of universal state provision too often fails because of lack of financial and administrative resources or the failure to respond to poor people's needs.

Part of the problem may be technical and logistical. Poor people often live in remote, low-density rural areas that are expensive and difficult to serve. Resources for poverty reduction may simply not stretch far enough in these environments.

But the problem is quite frequently management and motivation, with inadequate incentives for conscientious service delivery (chapter 6). For services that require the presence of an educated professional—education, health care, judicial services—it is often difficult to induce skilled civil servants to live in remote or rural areas.⁴² With children of their own, they often resist living where the educational and cultural opportunities are limited. Besides geography there is another kind of “distance” between providers of services and the poor. Since doctors, teachers, and judges are highly educated, they are often from very different social classes than the communities they serve, making interaction difficult and strained. If pay is determined by civil service rules and differentials for difficult postings do not fully compensate for living conditions, it is very difficult for the public sector to serve poor people.⁴³

Public provision is generally only part of the picture for services supplied to poor people, however, and other actors can often overcome the limitations on state provision. Religious groups often do much in providing education. NGOs are also a major force in many countries: in Bangladesh such agencies as the Bangladesh Rural Advancement Committee play a substantial role in delivery, with better results than the government's. And the private sector has always delivered services. More than half the health services in developing countries are private. In Bolivia almost three-quarters of visits to health clinics for treatment of diarrhea or acute respiratory infections are to private facilities.⁴⁴ The private sector also began playing a bigger role in infrastructure provision in the 1990s.

Sound governance, competition, and markets—and free entry for multiple agents, whether government, nongovernment, or private—are essential for effective service delivery, especially to poor people. (Indeed,

nonpoor communities and people are more likely to make effective use of state systems.) This is not an issue of the state versus the market, but of the use of different agents and mechanisms depending on the type of activity. In education the national curriculum and exams are a public function, but multiple agents can provide schooling and communities can hold teachers accountable.

The mix of state and market—and the mix of agents—depends on the nature of the service and the institutional context.⁴⁵ Where governments are weak, there might be a stronger case for open entry and reliance on private and nongovernment agents. But this, too, may require more monitoring and regulatory capacity than the government can muster. The importance of institutional reforms, good governance, and markets in providing quality services to poor people is illustrated here with examples from health and telecommunications.

Improving the delivery of health services

Sometimes I stay for long hours until I can see one of the doctors, then afterwards the nurse comes and tells me that he is not coming or he came but he will not be able to see me.

—Poor woman, El Mataria, Egypt

Despite impressive advances in health in recent decades, and despite the potential effectiveness of policies and programs, health services often fail to reach poor people. A fundamental problem: it is difficult to maintain staff in rural areas and to ensure conscientious care by those who do show up. In countries as diverse as Brazil, India, Indonesia, and Zambia, staff vacancies in health posts are much more numerous and last longer in poor and rural areas than in richer and urban ones.

Improving health services in poor communities might involve changing the incentive structure for public providers, switching from public provision to public financing of private or NGO providers, or changing the type of services the government is committed to offer, favoring those whose delivery is easier to manage.

Changing incentives in the public sector is often difficult, with civil service rules often tightly constraining hiring, firing, promotion, and pay (chapter 6). Different methods, all with their own risks, have been used, such as allowing private practice to supplement incomes, making education subsidies contingent on public service, or

paying extra allowances for hardship posts. None of them is problem free.

In recent years there have been more attempts to decentralize health services to subnational levels of government. This also changes the incentives for providers because they have to satisfy a different set of employers. Local governments may be more responsive to feedback from clients. But the jury is still out on the benefits of decentralization in health. Sometimes decentralization has simply shed responsibilities from the central government—not an example of good decentralization. Successful decentralization relies on increased participation of people as monitors of quality (see next section on participation).

Rather than provide services directly, governments can make better use of the private sector and NGOs. In many countries even very poor people prefer to spend money on services from the private sector (or from NGOs) if they perceive the quality to be higher than that of public services.⁴⁶ This preference can be exploited by changing the role of government from provider to financier.

Effective partnerships draw on the strengths of each sector—public, private, nonprofit—in improving provision of health services to poor people. The World Health Organization's immunization program has been a remarkable success (box 5.7). In Brazil, by having NGOs compete for funding, the government has harnessed the private sector's energy and expertise in the battle against AIDS and other sexually transmitted diseases. NGOs can often reach segments of society that shy away from official contact yet run the highest risk of HIV infection. By the end of 1994 NGOs financed under this system had distributed an estimated 2.6 million condoms and taken 11,000 calls to hotlines. Stringent government supervision has also been important in ensuring that all but 4 of the 191 NGO-run projects financed have gone forward without a hitch.⁴⁷

Governments might rethink the types of services they choose to offer, based simply on what they can credibly promise. Maintaining permanent staff in rural primary health care clinics may be too difficult for some governments to manage. Changing the mode of delivery or the types of services may be called for. India recently introduced a campaign to combat polio, reducing reliance on permanent clinics with short trips by medical personnel to rural areas—with good results.⁴⁸ Similarly, rather than relying on permanent health staff who are

Box 5.7
Effective public-private partnership
in immunization

In 1974 the World Health Organization (WHO) launched the Expanded Immunization Program, aiming for 80 percent coverage of children under five by 1990. Although the program started as a WHO initiative, it soon included many multinational organizations, and volunteers, private entrepreneurs, and government workers did the actual work within countries. The Rotarians, for example, raised more than \$240 million to provide polio vaccine to some 500 million children in 103 countries. Private manufacturers also took part, providing large volumes of vaccine at a low price to the United Nations Children's Fund's global distribution network and still making a profit.

The results have been spectacular. By 1990 the program had achieved its goal of immunizing 80 percent of children against the most common childhood diseases. The initiative succeeded because it combined public, private, and multinational efforts, with each organization using its comparative strength to fit each country's circumstances.

Source: van der Gaag 1995.

difficult to monitor and motivate, governments might find infrastructure projects providing clean water and sanitation both easier to manage and more likely to improve health conditions.⁴⁹ And rather than fighting doctors' preference to work in hospitals, governments might choose to focus more on gaining access to hospital services for poor people.⁵⁰

Providing telecommunications services to poor people

Given the right policies and regulations, the private sector is well positioned to provide telecommunications services to poor people. Better communications, bringing new influences and broader views of the world, can raise the earnings of poor people.⁵¹ In Sri Lanka telephone service in rural areas increased farmers' share of the price received for crops sold in the capital city from 50–60 percent to 80–90 percent.⁵²

Since the mid-1980s developing countries have been opening telecommunications to private participation and competition.⁵³ The arrangements range from private investment in publicly owned companies (China) to complete privatization and widespread competition, leaving the state to focus on regulation (Chile). Private participation has generally resulted in rapid growth in access, lower prices, and better service. In Peru five years after

reform, the number of fixed lines had increased more than 165 percent, the number of mobile lines had risen from 20,000 to nearly 500,000, and the number of locales with access to telephones had more than doubled. Between 1995 and 1996 the share of households in the poorest quintile with telephones increased from 1 percent to 7 percent.⁵⁴

Large and small providers can offer services side-by-side, facilitated by a wide range of innovative technologies. When local entrepreneurs were allowed to offer telecommunications services in Senegal, costs dropped and access more than doubled (box 5.8).⁵⁵ Provision of pay phones can greatly enhance poor people's access to telecommunications services, particularly in countries where telephone call rates are low but connection charges are high.⁵⁶ Advances in cellular technology have also dramatically increased access to telecommunications in countries where laws and regulations encourage geographically widespread coverage. Grameen Telecom, a nonprofit in Bangladesh, uses cellular technology, combined with the entrepreneurial talents of rural women, to provide services to villages (see box 4.6 in chapter 4). India, Peru, South Africa, and Thailand have seen dramatic growth in privately owned and operated telecenters, providing rural inhabitants with new sources of information and new opportunities.⁵⁷

Because private providers focus on the most profitable market segments, some pockets of the population—particularly poorer groups—may not receive access because of the high cost and low revenue potential of extending

Box 5.8
Local entrepreneurs increase access
to telecommunications services

Allowing local entrepreneurs to offer telecommunications services is an important first step in lowering the costs of public access. Pay phones in particular benefit those who cannot afford a household connection. In 1995 Senegal had more than 2,000 private telecenters, each with a telephone and many with a fax machine—four times the number just two years before. By 1998 it had 6,000. Sonatel (the Senegalese public telecommunications company) franchises phone service to the telecenter owner, who may charge a tariff up to 140 percent above the Sonatel price per call unit. On average, telecenters have paid \$3,960 to Sonatel and kept \$1,584 each year. The result: public access to telephones has more than doubled.

Source: Ernberg 1998; CSIR 1998.

service to them. To avoid leaving out poor people, innovative public-private partnerships and well-targeted government subsidies may be needed.⁵⁸ Chile used government resources to improve access for low-income households, people with disabilities, and public schools, health centers, and libraries and auctioned subsidies to private providers to pay for rural telecommunications roll-out. In about half the chosen locations, bids to provide service did not require subsidies as initially expected; the demand analysis done by the privatization group persuaded private investors of the profitability of providing services in these areas. Within two years 90 percent of roll-out objectives had been achieved for about half the initial budget.⁵⁹

Despite successes in extending telecommunications services to poor people, privatization is unlikely to significantly increase access in the absence of greater competition and more effective regulation to prevent abuse of market power. To make private participation pro-poor in telecommunications—and in infrastructure more broadly—policymakers may need to refocus regulations and transaction processes. A study of telecommunications provision in 30 African and Latin American countries found that strong competition is correlated with per capita increases in mainlines, pay phones, and connection capacity—and with decreases in the price of local calls. It also found that well-designed regulation was important in improving connection capacity.⁶⁰ A study on infrastructure reform in Argentina suggests that public-private partnerships can, with the right policies and regulations, also improve access to infrastructure for poor people.⁶¹

Participation: choice, monitoring, and accountability

The third principle for public action to promote asset accumulation involves engaging poor communities and poor people. Participation has three main objectives:

- To ensure that the preferences and values of communities are reflected in the choice and design of interventions.
- To use community and participant monitoring to improve implementation, transparency, and accountability.
- To give poor people more influence over their lives.

Participation, while potent, is no panacea. Depending on local organizations and power structures, shifting influence to local communities can lead to greater cap-

ture of benefits by local elites (chapter 6). In Bangladesh the extent to which food-for-education transfers go to poor or nonpoor households depends on the relative strength of organizations for the poor and the nonpoor.⁶² Similarly, some local values may be inimical to some groups of poor people—as with biases against women in many parts of the world, against lower castes in India, or against other disadvantaged ethnic or social groups. Shame, denial, and stigma over HIV/AIDS are in some countries reasons for local inaction.

The complexities of participation imply that it needs to be fostered by actions that strengthen the voice of poor groups in confronting social stratification or stigma. This implies that participation needs to be shaped in a broader institutional context. Local government is in the middle of the picture, with core interactions between municipalities and communities—as in the design of the Decentralization and Popular Participation Laws in Bolivia in the past decade. But local governments often need to be strengthened and made accountable: too often disempowered in the past, they face difficulties of weak capacity and local capture. Civil society organizations can also increase the influence of poor people and poor communities. These broader issues are taken up in chapters 6 and 7; here the importance of participation in enabling poor people to expand their assets is illustrated with examples from education, local infrastructure, and forest management.

Increasing local participation and accountability in education

Parents and local communities are demanding more of a say in children's education. As education systems have expanded in many developing countries, concerns have mounted about the quality of instruction. Central structures are weak in dealing with daily administrative tasks and too distant to take effective action against teachers who do not perform.

Community participation in primary education frequently focuses on monitoring teacher performance and ensuring the availability of school supplies. In the functions most suitable for local management—in-service training and pedagogical supervision—teachers unions can complement local parent-teacher associations. But teachers unions often fiercely oppose devolving control of hiring and firing to local levels, because that has often resulted in delayed salary payments and at times abuse by local officials, inciting teacher strikes in Nigeria and

Zimbabwe.⁶³ Ongoing reform efforts in Nicaragua are seeking to overcome such problems (box 5.9).

The overall trend in education is to decentralize. In 1993 Sri Lanka established school development boards to promote community participation in school management. In Bangladesh school management committees have been reactivated by the Social Mobilization Campaign, to involve communities in education. El Salvador started involving rural communities in school management in 1995.⁶⁴ In several communities in developing countries parent groups have responsibility for hiring and firing teachers and for supplying and maintaining equipment, under contract from education ministries. So far, however, there has been little experience with full-scale decentralization of teacher management to schools.

One of the few available quantitative impact evaluations, for the Primary Education Project in Mexico, shows that educational achievement improved significantly during decentralization and that the lower the initial achievement level, the greater the scope for

improvement.⁶⁵ There is also evidence that supervision incentives are the most cost-effective input for rural and indigenous schools. Nicaragua's experience with school autonomy reform indicates that a higher level of decisionmaking by schools is associated with higher student test scores, particularly in schools exerting greater autonomy in teacher staffing, monitoring, and evaluation.⁶⁶ In Nigeria teachers have shown up on time since local supervision was introduced.⁶⁷ And social assessments of Brazil's Minas Gerais program and El Salvador's Community Participation in Education program (Educación con participación de la comunidad, or Educo) indicate that as a result of the programs, teachers meet more often with parents and are regarded more highly by them. Their attendance is also better, which lowers student absences.⁶⁸

Other evidence suggests that community management of education can increase efficiency. Preliminary results for the Philippines show that primary schools that rely more on local support have lower costs, holding quality and enrollments constant.⁶⁹ In Mauritius parent-teacher associations have been so successful that government funds are being used to further stimulate this partnership.⁷⁰

Effective community management in education may, however, be hard to achieve. Finding qualified people to manage schools can be difficult, and the results are uneven. Botswana has had trouble attracting talented people to school boards.⁷¹ In the Zambezia province of Mozambique parent management committees have led to beneficial partnerships between communities and schools in some villages, but in others they barely function. Many villagers are afraid to openly criticize school staff, and committees have been co-opted by corrupt officials.⁷² There is also evidence that community involvement may have little impact where adults are barely literate.⁷³ Despite Educo's success in expanding access in El Salvador, it has not delivered higher achievement scores than traditional schools in the poor rural communities that were the top priorities.⁷⁴

Overall, experience suggests that a strong regulatory framework is needed and that training parents is vital to make local monitoring of schools effective. Many other concerns about greater household involvement in education can be addressed through public funding.⁷⁵ Continued monitoring and evaluation of local participation in education can tell much about what works and what does not.

Box 5.9 Local participation in Nicaragua's decentralized education system

Since 1993 Nicaragua's Ministry of Education has been decentralizing public primary and secondary education to local management boards, based on the following model:

- Legal responsibility for public education rests with the ministry, but some teacher management is delegated to other levels of the system.
- The center controls teacher preparation, establishes staffing levels, funds teacher salaries, and sets standards for teacher qualifications and pedagogical performance. It also drafts regulations and financial controls.
- The departmental level is responsible for supervisory functions, providing pedagogical support to teachers, and monitoring compliance with standards.
- Municipal education councils composed of local representatives discharge the administrative functions delegated to the local level. These councils pay teacher salaries (with central funds) and approve teacher appointments, transfers, leaves of absence, and dismissals in accord with central laws and regulations. They also oversee teacher incentives and issue incentive payments to eligible teachers.
- Teachers are accountable for what happens in their classroom. Parents monitor their attendance and report to the municipal education councils, which inform teachers weekly of their status in relation to incentives.

Source: Gaynor 1998.

Fostering ownership through participation and choice in local infrastructure

The policy of the party is that the people know, the people discuss, the people do, but here people only implement the last part, which is the people do.

—From a discussion group, Ha Tinh, Vietnam

Community involvement in planning and managing local infrastructure services can greatly increase ownership and sustainability—if communities make informed choices. While local infrastructure is scarce in most developing countries, the infrastructure that exists is often poorly conceived and maintained. Why?

Past efforts to provide local infrastructure have often failed to involve communities in key decisions, with central ministries deciding on what local communities needed and communities learning of a project only when the bulldozer showed up. Another problem has been a lack of choice. Faced with take-it-or-leave-it, few communities turn down a free or heavily subsidized investment.⁷⁶ This can kill local ownership, and upkeep of the investment becomes somebody else's responsibility. The incentive structures for agency staff can also compromise community participation—when the preference is speed in implementation. True community participation processes take time—it took years for the Orangi community in Pakistan to agree on the sewers it wanted to install⁷⁷—but they generate ownership and sustainability.

Involving beneficiaries in decisionmaking is the starting point in creating local ownership of infrastructure assets, ownership that is important in three key dimensions. First, it helps in choosing priorities, particularly in areas difficult to tackle through economic analysis, such as the relative value of social and productive investment, the complementarity between investments, and targeting within communities.⁷⁸ Second, it is essential for good operation and maintenance, because governments can rarely be relied on to perform timely upkeep of local infrastructure. Third, given the precarious budget situation of most developing country governments and the vast infrastructure needs (and total costs), local ownership is required for community cost sharing in investments and operation.

For the participatory process to generate ownership, all groups in the community—men and women, those well represented in the community and those in the

minority—must be able to voice their demands. Local communities reflect existing social, ethnic, gender, and economic divisions, and unless the question of who constitutes the community is understood and addressed up front, men and local elites may dominate decisionmaking and capture project benefits. In rural Sub-Saharan Africa men often identify roads as high-priority interventions, while women, when consulted, prefer to improve the footbridges and paths that make up the local transport system on which they rely.⁷⁹ In a village water supply project in rural India, water supply points were placed near influential households.⁸⁰ And in Honduras beneficiary assessments showed that in places where the social fund had financed piped sewerage, the choice of better-off households with water connections, most community members had wanted roads and bridges.⁸¹ Provider agencies—local governments, NGOs, project facilitators—can reduce the risk of capture by elites, but these agencies sometimes also try to capture benefits.

Requiring beneficiaries to share in the cost of investment can also improve ownership.⁸² Contributions usually come more readily when the communities and local governments responsible for operation and maintenance are given a voice in design and implementation. Local contributions vary. In Ghana communities contribute 5 percent of the cost for improved water systems and 50 percent for sanitation systems. Cost sharing in menu-driven or social fund-type projects is typically between 5 and 20 percent of project costs.⁸³ Significant financial contributions—between 20 and 55 percent of project costs—have been suggested as important for sustainability in a study of rural water projects.⁸⁴ There is also compelling evidence that ownership is a function of the institutional relationship between communities and service providers (chapter 6).⁸⁵

There is a trend toward providing local infrastructure through community-based multisectoral approaches.⁸⁶ By giving greater choice, such approaches have the potential to respond better to the priorities of each community, contributing to ownership and sustainability.⁸⁷ But it may not be desirable to offer open menus in every project. If there is a critical need for institutional or policy reform in water or transport, for example, multisectoral approaches are unlikely to address it (box 5.10). Similarly, some types of infrastructure involving more than one community, such as roads linking many communities, will rarely be demanded by individual communities even if they are needed. Such infrastructure is thus best supplied

Box 5.10**Single-sector and multisector arrangements for improving rural roads in Zambia**

In Zambia in 1997 there was a critical need to clarify the institutional arrangements for managing and financing rural roads. Many communities had constructed roads without the involvement of the local council, motivated by food aid from NGOs or by free-standing projects. But these communities, which had been fully compensated for their work, were unwilling to carry out maintenance on a voluntary basis. Local councils, strapped for resources, were unable to assume responsibility for the roads. As a result, scarce infrastructure assets were going back to bush, leaving communities in isolation.

To improve rural accessibility, the government of Zambia included district and community roads as part of a road sector investment project (Roadsip) in 1998. Recognizing the importance of local ownership in infrastructure, Roadsip addresses the institutional arrangements for the entire road sector—from the main highways to the community roads—and the government is exploring ways to put community ownership of roads into law.

Experience shows that efforts for sustainable improvements in rural accessibility at the community level also have to address sector policy and institutional reform and must involve the future own-

ers of each road. Improving the roads owned by different levels of government took a vertical single-sector approach working through local governments and the Ministries of Transport and Communications, Public Works, and Local Government and Housing. The approach for the community roads was a horizontal multisectoral approach working with the Zambian social fund.

Only by working through the social fund, which has a well-established system for facilitating community participation, could Roadsip ensure that communities would choose their priority investment. When communities request improvements to roads, footbridges, or paths, they pay 25 percent of project costs and the social fund and Roadsip pay 75 percent. On completion of a road project, the community forms a road owners association and applies to the national road board for grant support for maintenance (75 percent community, 25 percent road fund). Providing cost-sharing grants to communities for maintaining their roads does not have to cost much. At \$300 a kilometer, the cost of supporting the maintenance of 5,000 kilometers of community roads would be less than 2 percent of annual road fund revenues.

Source: World Bank 1998u, 1999ee.

and managed by local governments, although in consultation with communities,⁸⁸ using a unified investment planning process. Such a process can be followed by multisector or single-sector projects.

Among the attempts to introduce participatory processes that allow choice, social funds have been the most widely studied. Social funds aim to empower communities by promoting their participation in the selection, implementation, and operation and maintenance of their development projects, usually for local infrastructure.⁸⁹ But merely making financing available for investments in a variety of sectors is not enough to ensure that beneficiaries exercise their choice.⁹⁰ In many social fund projects community members are unaware of the full range of options eligible for financing. In Peru only 16 percent of beneficiaries could cite more than 5 of 19 eligible project types.⁹¹ Furthermore, the mere fact that communities have a choice does not necessarily mean that it will be an informed one.

For local infrastructure investments to be effective and sustainable, the demand-based approach generally has to be complemented by supply-side inputs (capacity building, information, outreach). Balancing a bottom-up identification of investments with carefully selected supply-side inputs will enhance the

prospects for equitable and sustainable infrastructure services for poor people.⁹²

Promoting local management of forests

Common property resources, because they possess characteristics of both public and private goods, are subject to free-rider problems that may lead to degradation or depletion in a free market. Poor people suffer the most from these problems when they depend heavily on natural resource assets.⁹³ The common response has been state management, with regulations to induce user behavior consistent with resource conservation. But the deplorable environmental outcomes under state-led programs, dwindling public resources, and the general shift from top-down to bottom-up partnership approaches have recently increased the emphasis on community-based natural resource management. This approach recognizes and reinforces the role of communities living in and around vulnerable natural resources, tapping their ideas, experience, values, and capabilities for preserving their natural resources.⁹⁴

Communities often manage natural resources in cooperation with—and with support from—other communities and higher (or external) entities, such as local or district governments, government agencies, or NGOs.⁹⁵

Often, such arrangements apply to forests. At the center of joint forest management is an agreement between governments and communities on the distribution of use rights and the sharing of benefits,⁹⁶ usually with communities getting a larger share of forest assets if they achieve agreed conservation and sustainability objectives.⁹⁷ The state, through the forest department, is often the owner of the forest and also regulates the system.⁹⁸ The approach has been widely applied in South Asia—for example, in the Indian state of Andhra Pradesh (box 5.11). In Africa community participation has helped restore forest resources in The Gambia and led to broader participation in rural development in Zimbabwe.

But the mixed record in other cases signals the challenges in making joint management an effective tool for promoting poor people's access to key natural assets. Overly centralized administrative structures have been one reason for failure. The experience of many countries confirms that powerful resistance at the national level to devolving rights to forest users can blunt effective community participation. And forest users or communities, often unorganized and with diverging interests, may lack the capacity, interest, and incentives to manage large forest areas.⁹⁹ The applicability and success of joint management will in each case be determined by the institutional context—including private interests, local norms, and traditions—and by the quality of state and local organizations and institutions. Part of the challenge of joint management is identifying the sociogeographic units that can work together to manage and conserve natural resources.¹⁰⁰

Several approaches have been used to overcome these obstacles. Providing incentives for stakeholder participation is essential: granting secure tenure and rights to forest users,¹⁰¹ more fully transferring management authority over forests (rather than user rights alone) to communities, sharing benefits, and using socially acceptable technologies that provide adequate revenue.¹⁰² Effective mechanisms for resolving conflicts are also critical, especially where resource users' livelihoods compete with other objectives, such as biodiversity protection or sustainable forestry.¹⁰³ Contracts between the government, villages, and fuelwood collectors in Burkina Faso and Madagascar specify which subgroups of users manage options in watershed and protected areas. Effective enforcement of these contracts is essential. In the Czech Republic, Ecuador, the Slovak Republic, and Ukraine sites outside protected areas are rezoned to accommodate

Box 5.11 Rejuvenating India's forests through joint action

The state government of Andhra Pradesh has introduced joint forest management on a massive scale. People on the fringes of forests are forming village organizations to protect forests—*vana samrakashna samithi* (VSSs). The organizations work with the state forest department, sharing the responsibilities and benefits of forest restoration, protection, and management.

The forest department is responsible for organizing and providing technical and administrative support to the VSSs. Villages and VSSs are selected carefully, but people from scheduled castes and tribes are automatically eligible for membership. The VSSs protect the forest from encroachment, grazing, theft, and fire, improving it according to a joint forest management plan. As compensation, the VSSs are entitled to all the forest's products (nontimber products as well as all the income from the harvest of timber and bamboo) as long as they set aside half the income for the future development of the forest.

The program got off to a slow start in 1992 because villagers were hesitant to assume responsibility for forest management. In addition, forest department staff had reservations about joint forest management. But in 1999 more than 5,000 VSSs were managing more than 1.2 million hectares of degraded forests in the state.

Results are impressive, and the program is expanding rapidly. The degraded forests have sprung back to life, timber smuggling has almost stopped, and cattle grazing is under control. There has been no further encroachment by agriculture on lands managed by the VSSs. Many villagers now work in the forests, and outmigration has declined. Soil conservation has resulted in higher water tables in many areas, increasing agricultural production. And local plants and animals are flourishing.

Source: Venkataraman and Falconer 1999.

multiple land uses.¹⁰⁴ Where local capabilities to control and manage resource use have been eroded or have broken down, external assistance can help strengthen and monitor resource sharing and management.¹⁰⁵

As in other examples of local participation, social inequalities can reinforce the influence of politically powerful and better-off groups, further reducing access for other groups.¹⁰⁶ In particular, women and poor people who depend on communal assets for their livelihoods can be pushed into deeper poverty if they are excluded.¹⁰⁷ While the forest management groups in Andhra Pradesh successfully involved women, a few programs in other Indian states still allow only one household member to participate—effectively excluding women. In several In-

dian villages women were barred from collecting any forest products on protected lands.¹⁰⁸

Even when women are not excluded, their numbers and their influence in management committees are low.¹⁰⁹ A policy and legal framework that promotes participation by poor users in the management of natural resources can help change this.¹¹⁰ Greater inclusion of women will also require awareness-raising activities to break through societal norms that keep women from playing an equal role with men.

Complementarities in public action

Recall the three principles for building assets for poor people—redistribution by the state, effective governance and use of markets, and participation. Effective action generally involves applying all three principles in a particular area or sector. The extent to which each principle is applied depends on the structural conditions, the type of action, the state of governance, and the extent of participatory involvement and social inequality. Take education. There is a case for public redistribution that seeks to ensure free or subsidized basic education for all. Effective delivery often involves multiple agents providing schooling—public, private, and civil society. And in poor areas participation of parents is important for increasing coverage, quality, and accountability.

In this section the mix of actions is illustrated for a natural asset (land) and for two physical assets (urban water and sanitation). The complementarities imply that action is needed on several fronts. But the priorities should depend on what poor people lack most relative to their potential opportunities. In poor rural areas this may be basic economic infrastructure, land-enhancing investment, water and sanitation services, and basic education and health care. In urban slums it may be infrastructure. And secure property rights on land are important for both.

Enabling good governance, active markets, and broad participation in land reform

Land reform has returned to the policy agenda in the past decade, as many developing countries move beyond implementing macroeconomic reforms to addressing the often weak micro-level supply responses in agriculture.¹¹¹ It is easy to see why farmland is a key asset for the rural poor. But secure access to land and for whom and under what conditions remains a thorny issue.¹¹² Poor people, especially poor women, often lack land rights. Land own-

ership remains concentrated, and efforts to increase land equality have often generated conflict.¹¹³ New approaches to land reform stress the importance of bringing together various stakeholders—the landless and their associations, the private sector (landowners), and government institutions at the local and national levels.

There are many ways to gain secure access to land—some informal and others formal, some spontaneous and others requiring extensive government intervention.¹¹⁴ In general, secure access to land can be gained through ownership, tenure, or customary use rights.¹¹⁵ Ownership rights are the most secure but also the least likely to be enjoyed by the poor and other socially excluded groups. Poor people often gain access to land through the rental market and customary use rights.¹¹⁶ In India, of the estimated 19 percent of rural households that lease land, more than 90 percent are landless or own very little land.¹¹⁷ When land is relatively abundant or poor people are well organized and influential, they can have secure land access without formal property rights and registration.¹¹⁸ This is still the case in many parts of Sub-Saharan Africa, though in recent decades population growth and market integration have accelerated the shift to individual land rights.¹¹⁹

Public action is critical to ensuring secure access to land for poor people. Land reform that enhances equity and productivity through government-supported programs is usually what first comes to mind (see box 3.8 in chapter 3). But many other actions can improve access to land. Policies and laws that clearly define land rights and protect poor people against land grabbing can greatly enhance their ability to use land as collateral and invest in land they already “own.” Well-functioning rental markets can raise the efficiency of land use and help the landless climb the “agricultural ladder” to ownership.¹²⁰ Providing legal assistance to poor people enables them to press their legal claim to a plot of land. Similarly, public support to institutions that protect women’s rights can be instrumental where deep-seated social norms and customs inhibit women from exercising effective control over land even when there are legal provisions for them to do so (chapter 7).¹²¹

Attempts at land reform often fail because they rely on government alone. New approaches emphasize continuous mechanisms of adjustment in land access, greater reliance on traditional forms of access, and greater use of land markets.¹²² Brazil, Colombia, the Philippines, and South Africa are experimenting with decentralized, community-based, demand-driven negotiations between stakeholders to find less antagonistic ways to improve access to land.

Such negotiated land reform relies to a great extent on experience gained in past attempts at land reform and on the successful aspects of demand-driven social funds. It addresses both supply and demand. Landlords are paid in cash rather than with highly discounted government bonds, as in the past. Beneficiaries receive grants for productivity-enhancing investments, because experience shows that unless those who receive land can make productive use of it, reforms will be undermined.¹²³

The negotiated approach has several innovative components, including strong involvement of local governments and communities in organizing land transfers and assisting the beneficiaries—and a high degree of transparency (box 5.12). In Colombia municipalities must develop a comprehensive plan to identify potential sellers and beneficiaries, and the plan is widely circulated to avoid corruption. Potential beneficiaries are offered training in farm management and assistance in developing land use plans. These plans must then be approved in public meetings of municipal councils.¹²⁴ Beneficiaries are supported by national, regional, or state councils that provide technical guidance and resolve administrative obstacles.

The results on the ground from the community-based approach are encouraging. Yet it is still too early to fully evaluate this new generation of reforms. While the negotiated land reform has been criticized for, among other things, burdening beneficiaries with loans they cannot repay and trying to replace expropriative land reform, revisions to the approach have sought to address these and other concerns. Another issue is costs. Although in Brazil and elsewhere this approach has achieved savings of as much as 40 percent relative to expropriative reforms, it still requires significant public outlays.¹²⁵ Its effectiveness needs to be assessed relative to other instruments for reducing poverty.¹²⁶

Providing water and sanitation services to the urban poor

The sewage runs right in your front door, and when it rains, the water floods into the house and you need to lift things . . . the waste brings some bugs. Here we have rats, cockroaches, spiders, and even snakes and scorpions.

—From a discussion group,
Nova California, Brazil

To improve water and sanitation services to urban residents, governments and municipalities the world over are

Box 5.12

A new approach to land reform in Brazil

Brazil has been expropriating and redistributing land since the mid-1960s, reaching an impressive number of beneficiaries, but with high costs and uneven quality.

To increase quality, lower costs, and speed reform, five state governments in the Northeast started a pilot program of negotiated, decentralized, community-driven land reform in 1997. The program provides loans for land purchases to landless rural dwellers (sharecroppers, renters, landless workers, labor tenants) or to smallholders who organize themselves in beneficiary associations. The associations have to identify landlords interested in selling them land, an approach that fosters direct negotiations between owners and the associations and reduces government intervention.

The pilot program also provides grants for productivity-enhancing community projects identified by the beneficiary associations, drawing on well-established poverty alleviation projects in the five states. The philosophy of the projects is that beneficiary associations are best placed to identify, rank, and implement investments, drawing on technical assistance as necessary. The same participatory philosophy has been adopted in the land reform pilots.

The program has three grant elements constituting about 50 percent of the cost of the land: an inherent subsidy in the interest rate, a grant for the complementary infrastructure investment, and an installation grant. A credit with a maximum term of 20 years is provided for the land. The land guarantees the loan and has to meet a number of requirements, including a price comparable to what prevails in the local market. Since there is a maximum grant per beneficiary family and the infrastructure investment grant is a residual, there is an incentive for the association to buy the land at the lowest possible cost.

Although the number of beneficiary families is still modest (about 10,000 in 330 projects), the pilot program has picked up momentum, and its success has prompted the central government to expand the program nationwide. Complementing the larger, expropriative program, the new program focuses on purchasing properties that cannot be legally expropriated.

Source: Deininger forthcoming.

exploring alternative approaches involving the private sector and local neighborhood and civil society groups. Working together, these actors seek to provide quality services to poor consumers while ensuring financial sustainability.

Water and sanitation services have traditionally been provided by public agencies. While there are exceptions, few developing countries have elicited strong, sustained performance from public water and wastewater utilities. Weak performance incentives and difficulties in shelter-

ing management decisions from political interference have locked many utilities into a cycle of poor service, low user willingness to pay, and insufficient maintenance. The inability of supply to keep pace with increasing demand from growing urban populations has forced poor households to find their own solutions. In many countries small informal water vendors and sanitation providers reach poor urban areas unserved by government utilities. In West African cities independent entrepreneurs supply most poor households (box 5.13). Similarly, in Guatemala City and Lima, Peru, which both have major utility companies, most families depend on private informal providers.¹²⁷ Although local suppliers can be more expensive than public providers, households would be worse off without them.

Since the early 1990s there has been a marked increase in large-scale private participation in water and sanitation in developing countries, reflecting a desire to deliver better services at lower cost—including services to poor urban neighborhoods.¹²⁸ Private participation can boost service coverage and make utility operations more effi-

Box 5.13
West African businesses pioneer water and sanitation services for the urban poor

Africa's independent water and sanitation providers suggest that the market has found solutions that benefit everyone: providers, utilities, and, above all, low-income customers. Recent studies in seven West African cities show that half the residents rely on private independent providers for their water and at least three-quarters rely on independent operators for sanitation. Depending on the city, independent providers cover up to 85 percent of marginal and low-income neighborhoods, and they serve many better-off families as well.

Independent sanitation providers, working without an official mandate or arrangement with local governments, include small informal operators as well as a few that have grown and become "legitimate." Providers rely on good client relations, since their operations are completely demand driven. Consumer ability to pay and competition among providers determine prices.

Independent sanitation providers charge higher prices than subsidized public companies, but public companies rarely recoup their operating costs—let alone the costs of installing sewer networks. And the independent providers are generally reliable and responsive to their customers. They extend credit (for a few days at least) and spread collections over days and weeks, far easier for poor clients to fathom than the three-month bills from public companies.

Source: Solo 1999.

cient, and the early results are encouraging. Coverage has increased rapidly, and in some cases tariffs have fallen (as in Manila, Philippines). The water supply system in Côte d'Ivoire, which introduced the first private concession in Sub-Saharan Africa, performs better than other urban water systems in West Africa.¹²⁹

But large-scale private participation in water and sanitation does not automatically mean better services for poor people. Unless carefully crafted, contracts may preclude the extension of services to low-income areas and create local monopolies. Contracts often mandate tariff structures and set connection fees that do not vary with the true cost of connection. These features discourage concessionaires from delivering service to low-income areas.¹³⁰ In Guayaquil, Ecuador, residential water tariffs did not cover collection costs. Every new connection, even if fully grant financed, was a net revenue drain on the utility.¹³¹ To serve low-income households better, concessions in Buenos Aires, Argentina, and La Paz-El Alto, Bolivia, have been restructured based on negotiations between governments and private providers and input from local stakeholders.

Good pricing policy is a key element of pro-poor policy.¹³² Whether water and sanitation utilities are publicly or privately managed, those most successful in expanding these services charge tariffs that cover costs. Such tariffs can increase access for low-income households by attracting private investment to expand supply and enhance quality. They can also end general government subsidies that go mostly to the nonpoor, releasing public resources for more targeted assistance to poor people. Notwithstanding the overall trend in water and sanitation toward greater cost recovery, governments can ensure greater access for poor people by subsidizing connections or, where network access is high, using well-designed block tariffs.¹³³

Additional measures to benefit poor households and attract private investors to water and sanitation include simplifying contracts, contracting out some regulatory functions, and increasing the predictability of regulatory discretion.¹³⁴ The design of regulation—particularly to reduce monopoly power—is also critical for pro-poor outcomes.¹³⁵ Regulation can enhance competition by permitting greater entry, including by nonconventional suppliers, and by changing service standards to fit local needs—for example, focusing on the potability of water rather than on technical construction standards set at industrial country levels.¹³⁶

Also important is involving users and local institutions in designing private sector options with user preferences in

mind—and fully leveraging the presence of alternative service providers. This is the approach of the Water and Sanitation Program—a partnership of donors, governments, and NGOs that focuses on poor rural and periurban areas. In each context this demand-responsive approach must be tailored to local conditions. Brazil's Prosanear (Water and Sanitation Program for Low-Income Urban Populations) follows six principles to provide sustainable water and sanitation services to poor households (box 5.14).

A similar approach aims to cover 35 towns in an urban water and sanitation project in the Philippines. Communities decide to participate (borrowing money from the Development Bank of the Philippines) after extensive consultations involving consumers, the mayor, and the town council. Service charges are used to repay the loan and cover operation and maintenance. The involvement of users, together with local government decisionmaking on participation, appears to ensure the ownership needed to enhance prospects for long-term sustainability.¹³⁷

• • •

The assets that poor people possess—or have access to—directly contribute to their well-being and have a potent effect on their prospects for escaping poverty. Human, physical, natural, financial, and social assets can enable poor people to take advantage of opportunities for economic and social development (just as their lack can prevent this). Expanding the assets of poor people can strengthen their economic, political, and social position and their control over their lives. Assets empower the poor. And assets help people manage risks (chapters 8 and 9).

Box 5.14 **Sustainable water and sanitation for Brazil's urban poor**

The first phase of Prosanear (1992–97) was a period of learning that led to six guiding principles for sustainable provision of water and sanitation in poor urban neighborhoods in Brazil:

- Start community participation at the very beginning of project preparation.
- Ensure that cost-recovery and subsidy rules are clear and transparent.
- Make formal, long-term arrangements for operating and maintaining systems an integral part of the design.
- Discuss all feasible technical options and their costs with communities.
- Coordinate projects with the local government's urban development plan from the outset of preparation.
- Confirm that the local government has a strong commitment to the project and to poverty reduction.

Source: Katakura and Bakalian 1998.

But because there is a two-way causal relationship between political and social structures and the assets of poor people, it may be necessary to tackle exclusionary or weak social structures in order to form assets (chapter 7).

Public action is essential to expand poor people's assets and to tackle asset inequalities—particularly in the distribution of human assets. Effectively using the redistributive power of the state and involving multiple agents (civil society, markets, and the state) and stakeholders in the provision of services are crucial to this end. Expanding poor people's assets is at the core of getting the benefits of growth to reach poor people faster. And it can be pro-growth (chapter 3).