3

Scaling Up Service Delivery

The chance for every child to go to primary school. A place to go for medicine and basic health care. Clean water flowing from a tap. Sanitation. Electricity at the turn of a switch. These basic services are taken for granted by citizens of developed countries. Yet in much of the developing world—even for relatively wealthy groups—these services are either unavailable or available only at low quality or high private cost.

The human development outcomes at the core of the Millennium Development Goals (MDGs)—primary education, literacy, gender equality, good health—depend on access to these basic services. Human development outcomes are also influenced by many other factors, such as individuals' traits and family backgrounds, community features (including roads and communications), and country characteristics (including income, demography, geography, and history). But striking differences in these outcomes across countries can be explained to an important degree by the policy choices that governments make to shape the financing and delivery of the basic education, health, water, and sanitation services that directly affect human development.

This chapter assesses the progress that countries and regions are making toward the human development MDGs, focusing on the three most difficult implementation challenges for most countries:

- Scaling up skilled providers—the doctors, nurses, and teachers needed to rapidly expand health and education services.
- Ensuring the sustained financing required to expand these recurrent cost intensive services.
- Making sure that resources translate into effective service delivery, by improving governance and accountability.

This selective focus means that the chapter gives less attention to many other issues—such as social protection, population trends, pharmaceutical availability, and school construction—that are also important for MDG progress. The goal is to complement other analyses, including *Global Monitoring Report 2004* and the recent Millennium Project and task force reports, which are more comprehensive. The chapter also contains an assessment of MDG-related global programs launched since 2000 and of the role donors need to play in accelerating MDG progress. It concludes with an action agenda for countries and their development partners derived from this stocktaking.

The Pace of MDG Progress, 2000–5

Five years after the global commitment was made to the MDGs, progress has been inadequate to ensure their attainment. Sub-Saharan Africa is

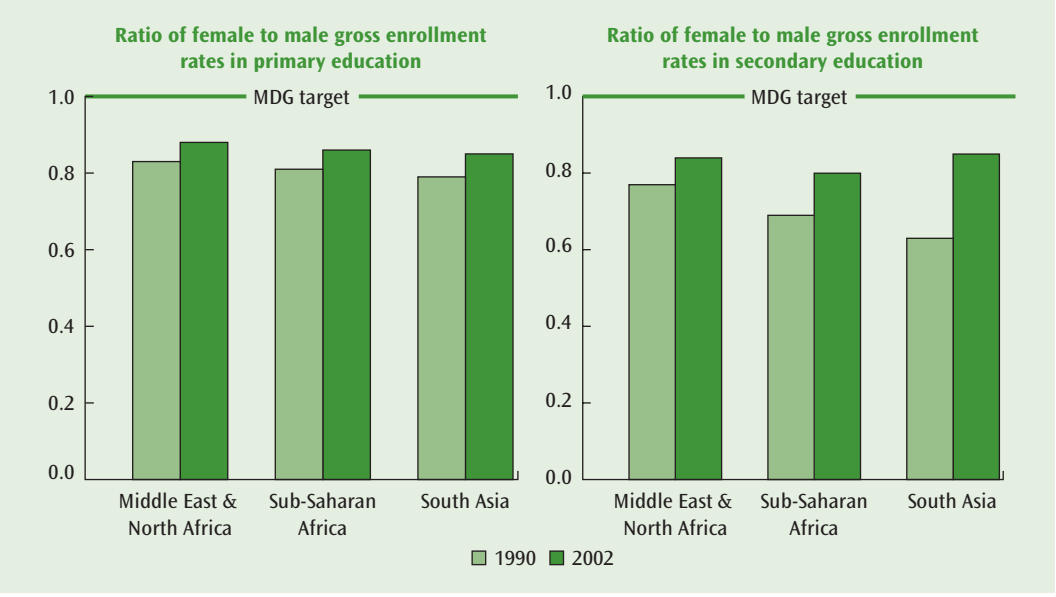
not on track to achieve a single MDG. In addition to the goals discussed in the following sections, it is off track on the hunger goal—and is the only region where child malnutrition is not declining. South Asia is off track on six goals: gender equality, universal primary school completion, child mortality, maternal mortality, communicable diseases, and sanitation. And while malnutrition in the region is dropping sufficiently to achieve the MDG target reduction, it remains at very high absolute levels: almost half of children under five are underweight. The Middle East and North Africa is also off track on six goals: gender equality, universal primary completion, child mortality, communicable diseases, water, and sanitation. Europe and Central Asia is off track on child mortality, maternal mortality, communicable diseases, and sanitation. And both Latin America and the Caribbean and East Asia and the Pacific are off track on child mortality, maternal mortality, and communicable diseases.

This slow progress is all the more troubling because the MDGs are only first-stage development goals; no 21st century country can afford to focus on these alone. No matter how far they are from universal primary completion, countries must simultaneously invest in secondary and tertiary education—both to produce the skilled workers that health, education, and other sectors need, and because increasing rates of primary completion generate social demand for more schooling. No matter how high child mortality is, countries must also address increased chronic diseases among adult populations. In a world of competing priorities and devastating natural disasters, the challenge facing developing countries is not just to achieve the MDGs; it is to achieve them at minimum global cost while simultaneously advancing other important goals. The following sections look at where progress is being made, where it is not, and why.

Gender Equality

The world will not achieve the first MDG target, set for 2005: gender equality in primary and secondary education. Despite strong progress in every region, girls' enrollments at the primary level are still less than 90 percent of boys' in Sub-Saharan Africa, South Asia, and the Middle East and North Africa (figure 3.1). At the secondary level, only Europe and

FIGURE 3.1 Despite progress, the 2005 gender target will not be met



Source: UNESCO Institute for Statistics.

Central Asia has achieved enrollment parity. Primary completion rates show the same pattern—great progress in narrowing the gap, but as of 2003 the completion rate for girls was still more than 15 percent below that of boys in Sub-Saharan Africa and South Asia. Forecasts for the 2015 goal of gender equality in tertiary education are even less encouraging, with less than 10 percent of developing countries on track to achieve this target.

Although gender parity in primary education will not be reached globally in 2005, an impressive number of countries will achieve it—even in the three regions with the deepest education inequality. In Sub-Saharan Africa these countries include Botswana, Gabon, The Gambia, Lesotho, Mauritania, Mauritius, Namibia, Rwanda, Seychelles, Tanzania, Uganda, and Zimbabwe; in South Asia, Maldives and Sri Lanka; and in the Middle East and North Africa, Jordan, Libya, Oman, and Saudi Arabia. Jordan and Oman have also achieved gender parity in secondary education.

While some of these countries had relatively equitable gender outcomes in education in 1990 (the year against which progress toward the MDGs is measured), in others policy actions and incentives have transformed the playing field for girls. In Guinea girls' enrollments in primary education rose from barely 40 percent of boys' in 1990 to a projected 88 percent in 2005. Similar progress has been made in Benin, The Gambia, and Mauritania, as well as Bangladesh, Morocco, Nepal, Papua New Guinea, and Yemen. How did they do it? Box 3.1 profiles different strategies.

But achieving gender equality and empowering women—the third MDG—require more than parity in education enrollments. Additional targets include attaining gender parity in literacy and increasing the share of women in nonagricultural employment and national parliaments. Although progress has been made, the gap has not closed in Sub-Saharan Africa, South Asia, and the Middle East and North Africa, where literacy rates among 15–24-year-olds are 10–20 percentage points lower for women than for men.

Paid employment is crucial to women's empowerment and important to families' welfare because women are more likely than men to invest their income in health care, education, and food.[1] But progress has been slow in this area. Between 1990 and 2003 women's share of nonagricultural employment in developing countries increased only 2 percentage points, from 35 percent to 37 percent.

More encouraging has been progress in political representation. The share of countries where women hold at least one-fifth of the seats in national parliaments grew from 13 percent in 1990 to 24 percent in 2004—a significant change. But as noted in a report prepared for the recent 10-year follow-up to the 1995 Beijing Conference on Women, the real mark of progress is women's greater prominence in political life translating into leadership positions and more influence over decision making. And in many cases, that has yet to happen.[2] Much remains to be implemented from the Beijing action plan, including faster progress on the gender equality targets reaffirmed in the MDGs.

The world's failure to meet the 2005 target for gender parity in primary and secondary education should not be rewarded with a reprieve to 2015. Most regions are on track to achieve parity sooner—particularly at the primary level, where girls' enrollments have been growing faster than boys' in every region. The United Nations should review the latest data and set a new year for this target, such as 2007 or 2008, to encourage the fastest possible progress.

Universal Primary Education

Primary education completion rates are increasing in all developing regions. But as with gender equality, in the Middle East and North Africa, South Asia, and especially Sub-Saharan Africa the pace of progress is too slow to ensure attainment of the second MDG: universal primary completion by 2015 (figure 3.2). Latin America and the Caribbean has made strong progress and, on a population-weighted basis, both it and East Asia and the Pacific are close to achieving the goal. In both regions, though, some smaller countries are not on track.

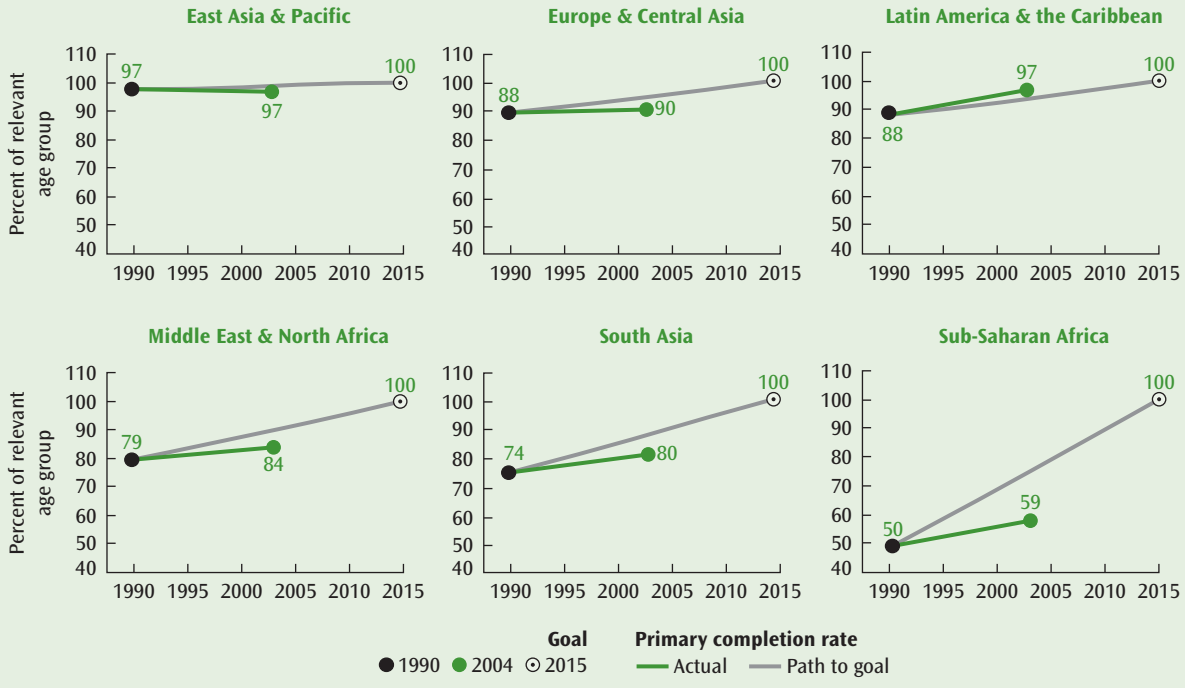
BOX 3.1 Sub-Saharan Africa shows that fast progress is possible in closing the gender gap

Twelve Sub-Saharan countries will meet the 2005 target of gender parity in primary education, and at least three others will come close. Many countries in other regions have also made exceptional progress in getting girls into school. In every case some combination of the following policies lies behind the progress:

- *Making schools affordable.* Eliminating school fees increases both girls' and boys' enrollments—but as shown in Tanzania and Uganda, these policies have a larger effect on girls. Countries such as Bangladesh and The Gambia have gone further, providing scholarships and financial aid for girls in the poorest communities. World Food Program "take-home rations" in Eritrea, Ethiopia, Ghana, Guinea, and many other African countries have also been associated with significant increases in girls' school attendance and completion.
- *Reducing the distance to school.* New schools often expand girls' enrollments faster than boys' because they relieve concerns about girls' safety in walking long distances to school.
- *Providing water and sanitation at schools.* In Bangladesh, India, Kenya, Nigeria, and other countries the introduction of clean, private sanitation and washing facilities in schools has raised girls' attendance rates by as much as 11 percent. UNICEF surveys in Africa and Asia show that in some countries as few as 10 percent of schools have adequate, separate sanitation facilities for boys and girls, and in some schools as many as 150 students share a single latrine. Standpipes at schools also ease the burden that girls face in fetching household water from distant sources.
- *Providing bilingual instruction.* Instructing children in their first language during the early years of schooling lowers repetition and raises attendance, classroom participation, exam scores, and promotion rates—especially for girls. In Mali teaching in the mother tongue in grade 1 and gradually replacing it with French afterward has led girls to volunteer more during class, read more comfortably, and stay in school. In Mauritania a switch to Arabic language instruction has increased girls' enrollments.
- *Increasing the number of female teachers.* In Botswana a consistently positive relationship has been found between the proportion of female teachers in a school and girls' achievement levels. The Gambia has reviewed curriculums to ensure that they are gender-sensitive and offers career counseling for girls.
- *Involving the community.* Involving communities in the development of national and local action plans helps identify and address factors that deter girls from attending school. In 1993 The Gambia became the first country to apply the Participatory Learning and Action approach to girls' education. Ideas that emerged included flexible fee payment schedules, separate latrines for girls and boys, and enforcement of sexual harassment policies in schools—and sharply increased girls' enrollments at both the primary and secondary levels. In Guinea, Kenya, Senegal, and Uganda this approach has led to changes in school calendars and fee policies, the creation of single-sex schools, and provision of community-supervised protection for girls.
- *Raising public awareness.* Niger's increase in girls' primary enrollments is partly due to campaigns on the importance of girls' education, particularly in rural areas. The Gambia has used women's theater groups to raise community awareness about the importance of girls' education.
- *Making schools girl-friendly.* Allowing married and pregnant adolescents to attend school and offering flexible school schedules has promoted girls' secondary school attendance in Botswana, Guinea, Kenya, Malawi, and Zambia.

Sources: IRC 2004; UNICEF Nigeria 2003; UNICEF India 2003 and other data; Sen 2000; UNICEF Somalia 1999.

FIGURE 3.2 Several regions are off track to achieve universal primary completion by 2015



Sources: UNESCO Institute for Statistics and World Bank joint database.
Note: Data are weighted by population.

Although Europe and Central Asia needs to accelerate progress, the goal is within reach.

In the Middle East and North Africa, countries such as Morocco have made rapid progress, although primary completion rates in many of the large population countries in the region have been stagnating. In South Asia, reaching the education MDG will require faster overall progress: in India, where impressive performance in a number of states has not yet translated into aggregate national progress; in Pakistan, which remains seriously off track; and Afghanistan, which is recovering quickly, but from a tragically low base.

In Sub-Saharan Africa the overall prospects are dim. In 2003 only 59 percent of children completed primary school, and on current trends the region will not achieve universal primary completion until 2061.

Yet enormous education progress is being made in many Sub-Saharan countries. Annual increases in primary completion in the region's best-performing countries far exceed anything achieved by today's developed countries when at a similar stage in their development.[3] Since 1990, 8 of the developing world's 10 top performers have been in Africa: Benin, Eritrea, Ethiopia, Guinea, Mali, São Tomé and Principe, Togo, and Malawi. In all these countries primary completion rates have grown by more than 5.0 percent a year, well above the low-income country average of 0.8 percent. Core elements of policy progress in these and other countries have been political commitment to universalizing education, actions to lower the costs of expanding schooling through more efficient construction, teacher training, and hiring, attention to crucial inputs such as books and materials, and "demand side" adjustments to make schools more accessible—by adapting the language of instruction, changing school calendars, eliminating fees, and other actions.

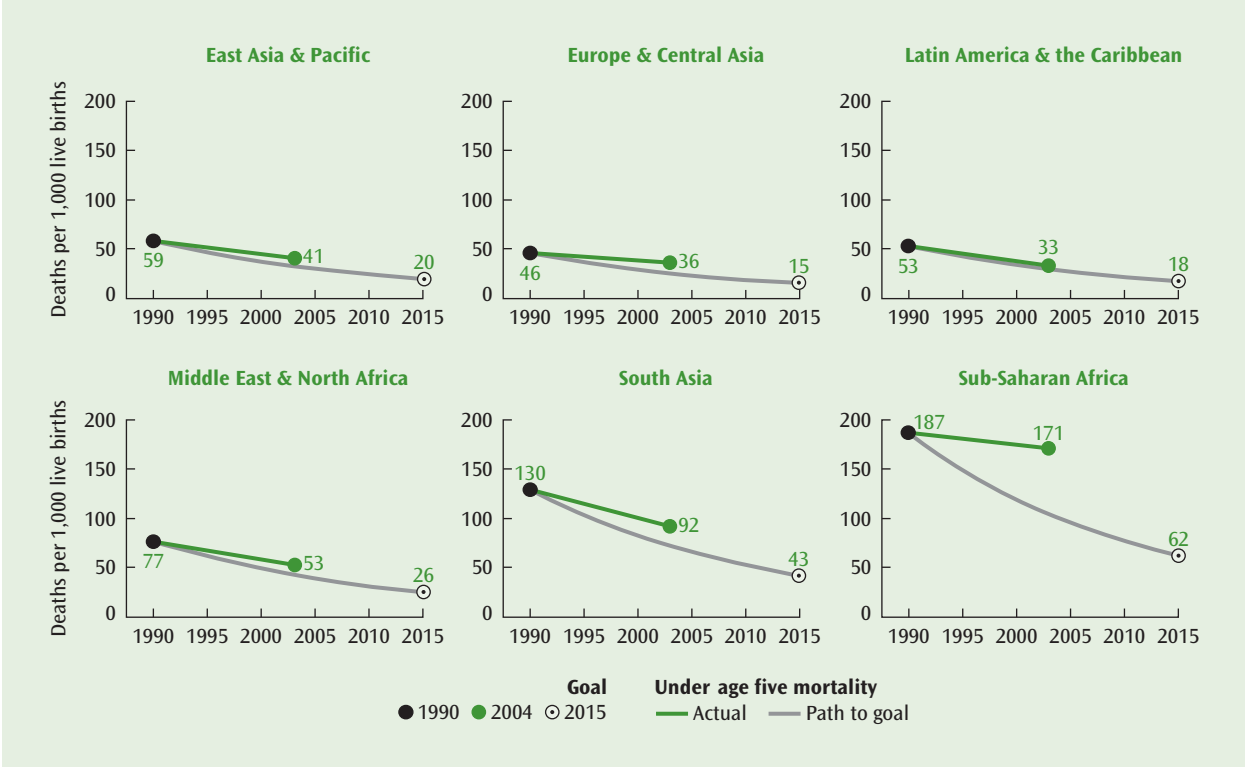
For many countries the main challenge for attaining this MDG is the very low base from which they started. For any country with a primary completion rate below 60 percent in 2003, even the highest recorded rates of improvement (on a percentage point basis) would not be enough to attain the MDG. Around the world, 26 countries fall below that threshold—and 22 are in Sub-Saharan Africa.

In another set of countries, though, slow progress is the issue. Between 1990 and 2000 the primary completion rate was stagnant in Ghana, Kenya, Nigeria, and Tanzania, and has only recently begun to increase. These countries can attain universal primary completion, but only if progress improves substantially and is sustained. That is also true for a significant number of countries in other regions, most notably India. There is clear scope for knowledge diffusion and increased financing to help lagging countries, including through global programs such as the Education for All Fast Track Initiative. But global attainment of universal primary education by 2015 is far from assured.

Child Mortality

Every week in the developing world, 200,000 children under five die of disease—as many lives as were lost in the recent South Asian tsunami. The fourth MDG aims to reduce infant and under-five mortality by two-thirds between 1990 and 2015, implying an average reduction of 4.3 percent a year. Although no region achieved such a population-weighted reduction in the 1990s, Latin America and the Caribbean, the Middle East and North Africa, and East Asia and the Pacific are not far off track (figure 3.3).

FIGURE 3.3 Despite progress on child mortality, all regions are off track



Sources: UN and World Bank staff estimates.
Note: Data are weighted by population.

As with the primary completion rate, there is substantial variation in trends at the country level. Even in Sub-Saharan Africa, where little progress has been made overall, countries such as Ethiopia, Malawi, Mozambique, Namibia, and Uganda have improved child survival despite challenging circumstances, such as widespread HIV/AIDS (box 3.2). But other Sub-Saharan countries saw child mortality increase in the 1990s, erasing earlier progress.

About 70 percent of child mortality occurs in the first year of life, and almost 40 percent in the first month. Most of these deaths are due to five highly preventable and treatable conditions: acute respiratory infections, diarrhea, malaria, measles, and malnutrition. Basic postnatal care, breastfeeding, and access to simple, low-cost treatments for diarrheal diseases can have a major impact on infant mortality. Water supply and sanitation can also make a big difference: about 90 percent of diarrheal deaths among children are due to lack of safe water and sanitation.[4] Finally, low-cost immunizations against measles, diphtheria, polio, and other diseases can prevent a lot of childhood sickness and death. Encouragingly, three developing regions have achieved 90 percent immunization coverage against measles: Europe and Central Asia, the Middle East and North Africa, and Latin America and the Caribbean. But coverage has fallen in East Asia and the Pacific, and in Sub-Saharan Africa it has stagnated at less than 60 percent.

Maternal Mortality

Every week 10,000 women in the developing world die giving birth. A woman's risk of dying during delivery is 250 times higher in low-income than in developed countries. The fifth MDG calls for reducing the maternal mortality ratio by three-quarters between 1990 and 2015, an average annual reduction of 5.4 percent. Due to scarce data, maternal mortality is tracked largely through modeling projections from demographic data rather than direct reporting, and trend estimates are quite tentative. The World Bank estimates that only one developing region is on track to reach the maternal mortality target (Middle East and North Africa), though two others (East Asia and the Pacific, Europe and Central Asia) are close.[5] In Latin America and the Caribbean the maternal mortality ratio (190 per 100,000 births) is lower than in other regions, but it is proving more difficult to achieve incremental improvements.

BOX 3.2 Reducing child mortality in Mozambique

Despite low economic development and high poverty—per capita gross national income (GNI) was $200 in 2002, and 54 percent of the population lives below the poverty line—Mozambique has made impressive progress in lowering under-five mortality, from 226 per 1,000 live births in 1990 to 170 in 2003. While this level is still very high, the decline is encouraging given the country's unfavorable disease environment, with HIV/AIDS affecting an estimated 15 percent of adults and a high prevalence of malaria and other infectious childhood diseases.

What accounts for Mozambique's success? One important factor has been the country's efforts to provide basic preventive health services in remote areas, delivered by both community health facilities and mobile teams, resulting in high coverage for key interventions. About 85 percent of pregnant women receive antenatal care, while 77 percent of children are immunized against measles and 63 percent are fully immunized. Community-based services also promote healthy behaviors such as breastfeeding and oral rehydration therapy. Mozambique has shown that mobile teams can be effective in an environment with too few health facilities and a dire shortage of qualified health staff, reaching households that otherwise lack access to health care.

Source: World Bank 2004c.

Because measuring maternal mortality ratios directly is so difficult, the percentage of deliveries attended by medically skilled personnel is also used to track progress. Although this indicator increased in all regions between 1990 and 2000, it is still below 50 percent in South Asia and Sub-Saharan Africa.

HIV/AIDS, Malaria, and Other Diseases

The sixth MDG is to halt and begin reversing the spread of HIV/AIDS, malaria, and other major communicable diseases by 2015.

HIV/AIDS

Despite 20 years of efforts to control it, HIV/AIDS continues to spread. In 2004, 39 million people were living with HIV/AIDS (figure 3.4) and 3.1 million died—more than from any other infectious disease. That same year nearly 5 million people became infected with HIV, 2 million children were living with it, and 15 million children had been orphaned by AIDS.

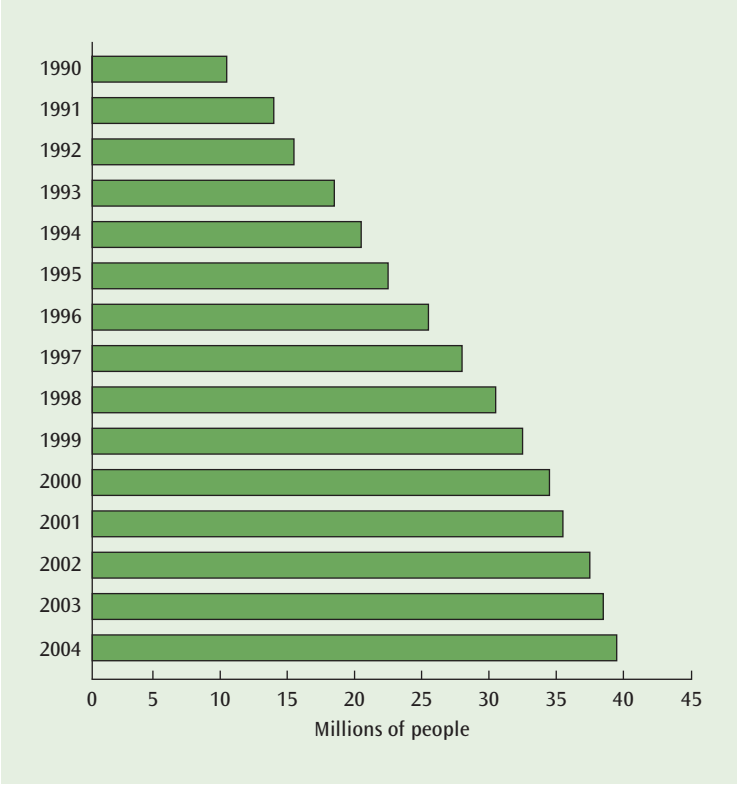
Sub-Saharan Africa remains by far the worst-affected region, home to nearly two-thirds of all people with HIV/AIDS. The average HIV prevalence rate in the region is 7.4 percent, or 1 in every 14 adults—and in parts of Southern Africa it is 1 in 3. In nine African countries life expectancy has dropped below 40 years because of the disease, and across the region 11 million children have been orphaned by it.

But HIV/AIDS poses enormous threats in every region. Since 2002 the number of people living with it has risen by 50 percent in East Asia, reflecting China's rapidly growing epidemic, and by 40 percent in Europe and Central Asia, driven by its rapid spread in the Russian Federation and Ukraine.

Two decades of battling HIV/AIDS have taught the world two main lessons. First, countries have a crucial window of opportunity early in the epidemic, when prevalence is largely confined to high-risk populations such as sex workers and intravenous drug users. Brazil, Cambodia, Senegal, and Thailand are among the countries that acted decisively to introduce strong prevention programs when prevalence was low, and they have achieved declining levels of new infections. Early action in Thailand averted an estimated 5 million infections during the 1990s.

Second, even in countries where HIV/AIDS has spread into the general population and the main mode of transmission is heterosexual, some are doing better than others at curbing its spread. Among African countries, in Uganda HIV prevalence among pregnant women dropped from 13 percent in the early 1990s to just under 5 percent in 2002, and in Botswana, Ethiopia, and Kenya the prevalence in urban populations appears to have stabilized.[6] The key has been forthright national leadership, widespread public awareness campaigns, and intensive prevention efforts.

FIGURE 3.4 Since 1990 the number of people living with HIV/AIDS has quadrupled



Source: UNAIDS data.

Yet these lessons appear unheeded in many countries, including large countries such as China, India, and the Russian Federation. Unless more aggressive actions are taken in these and other countries, HIV prevalence is projected to rise further. Work continues on vaccine development, and the Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates that the number of people with access to antiretroviral drugs increased from 300,000 in 2002 to 700,000 in 2004. But given that the impact of expanded treatment on HIV transmission is not clear, it is crucial to redouble education and prevention efforts at the same time.

Financing, research, and global advocacy for HIV/AIDS have increased significantly since the MDGs were adopted. Commitments for HIV/AIDS prevention and treatment programs jumped from less than $400 million in the late 1990s to an estimated $6 billion in 2005. Now concerns have shifted from financing to implementation, reflecting the multiple donor procedures for accessing support and weaknesses in health delivery systems. Faster progress is needed in harmonizing donor aid at the country level and implementing the "three ones" principle agreed to in mid-2004: that all donors will work through one HIV/AIDS coordinating agency in each country, one national strategic plan, and one system for monitoring and evaluating progress.

MALARIA

Malaria takes a heavy toll on health and economic productivity where it is endemic, and it is concentrated in countries that can least afford it: 69 of the 80 poorest countries have endemic malaria. Data are poor because many cases go unreported, but the annual incidence of malaria is estimated at 300–500 million cases—with 1.2 million deaths, mainly among children. About 85 percent of these deaths occur in Africa, 8 percent in Southeast Asia, 5 percent in the Eastern Mediterranean, 1 percent in the Western Pacific, and 0.1 percent in the Americas. In many African countries malaria is the leading cause of death.

Yet malaria is eminently preventable, curable, and controllable with modern technologies—at a cost of a few dollars per person. Brazil's malaria control program is credited with averting an estimated 2 million cases and 231,000 deaths. Other countries that have made impressive progress include Eritrea (which has reduced malaria incidence over four consecutive years through the use of insecticide-treated bednets), India (which since 2002 has reduced malaria incidence by 58–98 percent across different states), and Vietnam.

Effective strategies generally involve a combination of vector control, insecticide-treated bednets and curtains, indoor residual (house) spraying with insecticides where the pattern of transmission warrants it, intermittent preventive treatment during pregnancy, and prompt treatment of infections with effective drugs. Global funding for malaria has almost quintupled in the past few years, from $120 million to $570 million, thanks largely to the Global Fund to Fight AIDS, Tuberculosis and Malaria. Yet most experts estimate that as much as $1 billion more a year is needed. Bednet use remains low in many malarious countries, vector control is inadequate, and increased resistance to traditional drugs is requiring newer, more expensive treatments. But experience shows that rapid gains can be made against malaria, even in countries with weak health systems. The Roll Back Malaria effort provides a global framework for intensified progress.

Water and Sanitation

Expanding water and sanitation services is one of the most cost-effective strategies for improving health outcomes. Water and sanitation coverage also makes powerful contributions to other MDGs, including achieving gender equality and reducing poverty and malnutrition. The seventh MDG seeks to halve by 2015 both the proportion of people without sustainable access to safe water and the proportion

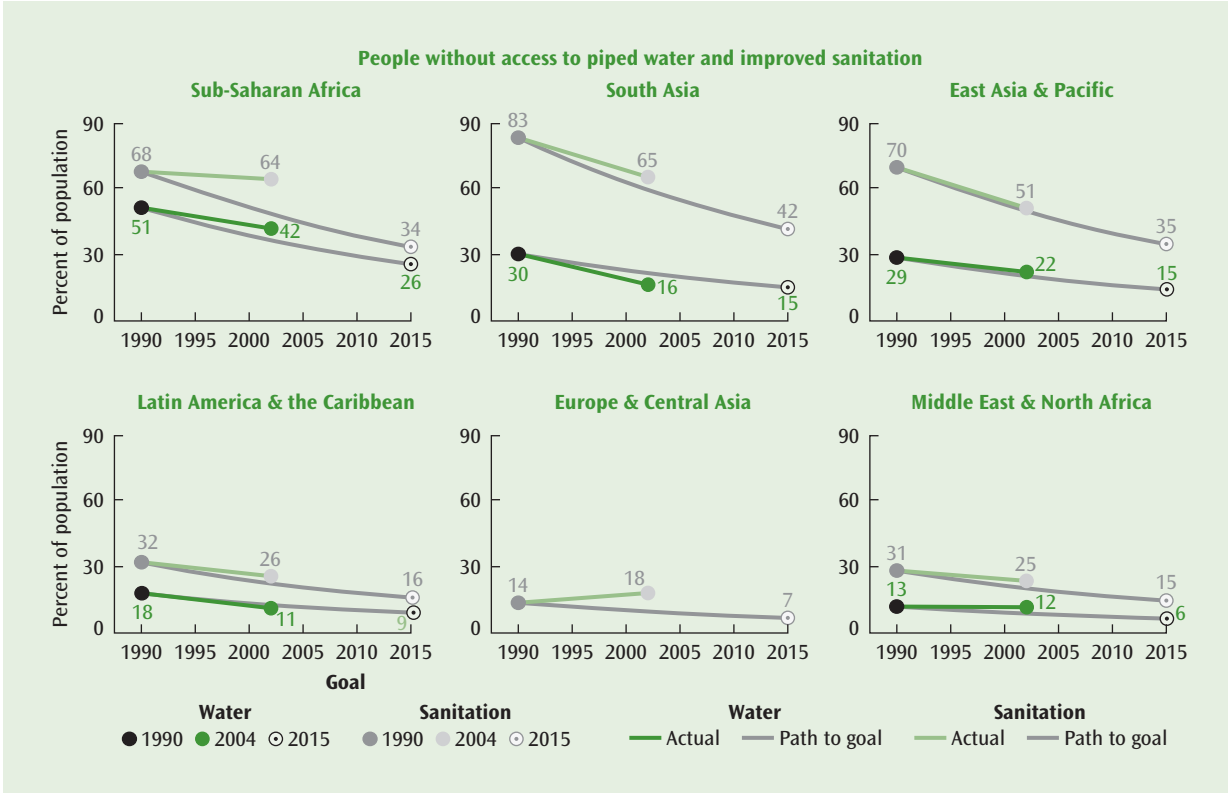
without adequate sanitation. Achieving both targets would provide safe water to another 1.5 billion people and sanitation to another 2.0 billion people. Unsafe water and poor sanitation and hygiene are responsible for 90 percent of diarrheal diseases and an estimated 4–8 percent of the total disease burden in developing countries.[7]

The most recent estimates by the World Health Organization and United Nations Children's Fund indicate that most developing regions are on track to achieve the safe water target (figure 3.5). The exception is Sub-Saharan Africa, where only slightly more than half of the population has access to safe water. To achieve the water target in Sub-Saharan Africa, for each of the next 10 years the number of additional people served would have to double for urban water and triple for rural water. Only a handful of countries in any region have achieved such progress, particularly in rural areas. But Ghana, Senegal, South Africa, and Uganda have shown that it can be done.

The sanitation target is more problematic, with only two regions on track—East Asia and the Pacific and Latin America and the Caribbean. At current trends, the world will miss the sanitation target by more than half a billion people. But even within lagging regions some countries have made significant progress. Between 1990 and 2002 Bangladesh, India, and Nepal more than doubled sanitation coverage, with some notable successes in slums (box 3.3). In Africa strong progress has been made by Cameroon, South Africa, and Uganda. And within countries there are local success stories, as in Burkina Faso and Senegal.

The keys are sustainable institutions financed through effective cost recovery of

FIGURE 3.5 Progress is being made in water supply, especially in South Asia, but sanitation progress is slower



Source: WHO and UNICEF joint monitoring program.
Note: Only sanitation estimates are available for Europe and Central Asia.

BOX 3.3 Improving sanitation in India's slums

The crowded slums of Mumbai (formerly Bombay), India, are home to 7 million people. Recognizing their needs, an innovative sanitation program financed by the World Bank has built 320 toilet centers that serve 500,000 slum residents. These community-managed centers provide sanitary excreta disposal (with continuous water supply, to ensure hygiene), offer health education, and are gradually replacing municipally managed latrines that were rapidly falling into disuse. Although the toilet centers were financed by grants, user families pay monthly subscriptions that cover the running costs, including wages of attendants. All the toilet centers have been well maintained and are the pride of the communities that own them. The success of similar community-run programs in other Indian cities has led to the adoption of a nationwide slum sanitation program that will apply the same principles.

Source: OED 2003.

sanitation surcharges linked to water bills, greater use of demand-based onsite sanitation technologies, and increased reliance on small-scale local contractors and artisans as sanitation service providers. A shift in focus to onsite sanitation, which is much cheaper than piped sewerage, is helping increasing numbers of low-income countries speed MDG progress. In Dakar, Senegal, for example, onsite sanitation has permitted service delivery to hundreds of thousands of periurban slum residents for the first time. The investment cost was about $400 a household, and residents can afford the operating costs.

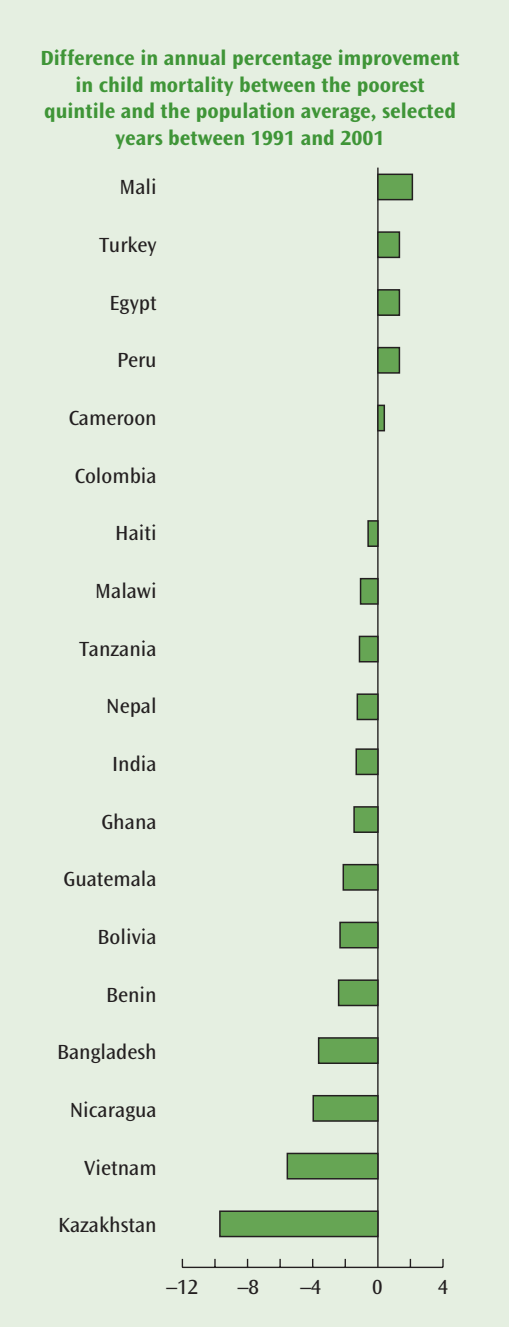
Is MDG Progress Reaching Poor People?

The MDGs aim to improve human welfare. But it is important to recognize that some of the goals—especially in health—can be achieved without progress reaching poor people. In two-thirds of the countries that have reduced child mortality since 1990, outcomes for families in the lowest income quintile have improved less than for the population as a whole (figure 3.6). In some of these countries outcomes have actually worsened for the poor while improving for richer groups.

It is crucial to learn from the exceptions. During the 1990s Mali, Turkey, Egypt, Peru, and Cameroon achieved faster reductions in child mortality for the poorest quintile than for the population as a whole. Because improvements in health outcomes for the poorest groups will not automatically result from the pursuit of MDG health goals, policymakers must focus on targeted strategies for reaching poor households. In many settings effective targeting must take into account other characteristics of disadvantaged groups, such as ethnicity or rural residency. Effective strategies for reaching target groups include prioritizing the expansion of services in poor or rural regions, expanding those services (such as basic water and sanitation, primary health care, and primary education) that most benefit poor people, and eliminating user fees in primary education and for essential health services for poor families, since such fees can impede their access to services.

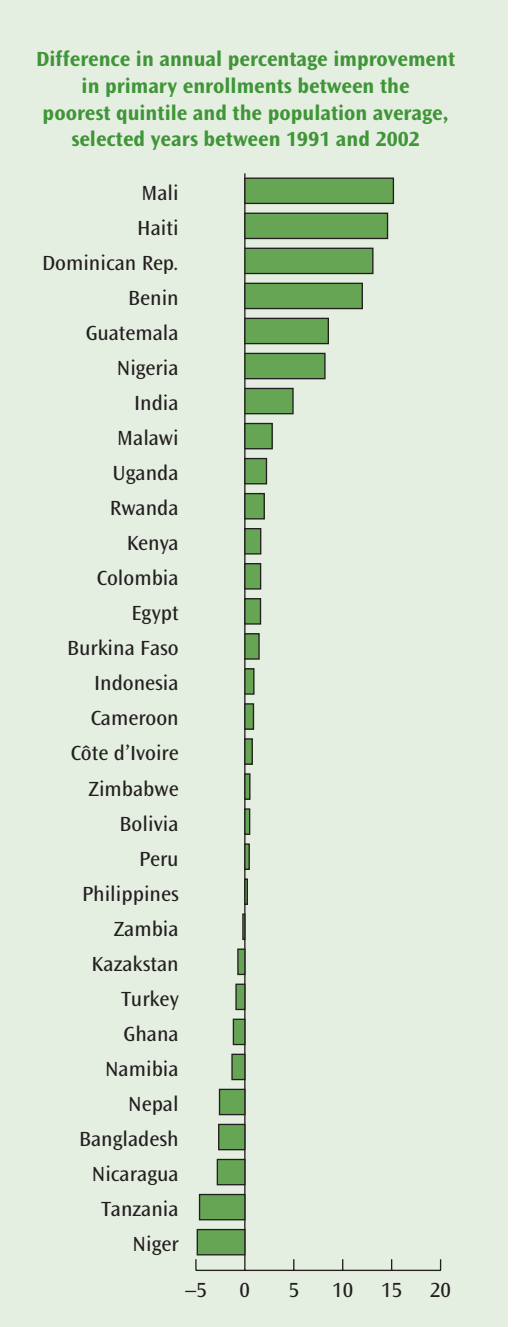
In education, progress toward universal primary completion more often enhances equity. In 21 of 31 developing countries for which comparable survey data are available between 1991 and 2002, primary enrollments for children in the bottom income quintile increased faster (in two cases, declined less) than enrollments for the population as a whole (figure 3.7) This finding is confirmed by more detailed studies in countries such as India, showing that expansion of basic education has been progressive in impact—that is, it has benefited lower-income groups more than other groups.[8] Still, in about 30 percent of countries primary enrollments for children

FIGURE 3.6 Progress on health does not always benefit poor people



Sources: World Bank estimates from Demographic and Health Survey data.

FIGURE 3.7 Progress on education is generally more equitable



Source: World Bank estimates from Demographic and Health Survey data.

from upper-income groups increased more than those for the poorest children. As policymakers and development partners track national progress toward the MDGs, it is essential to watch the progress of the poor.

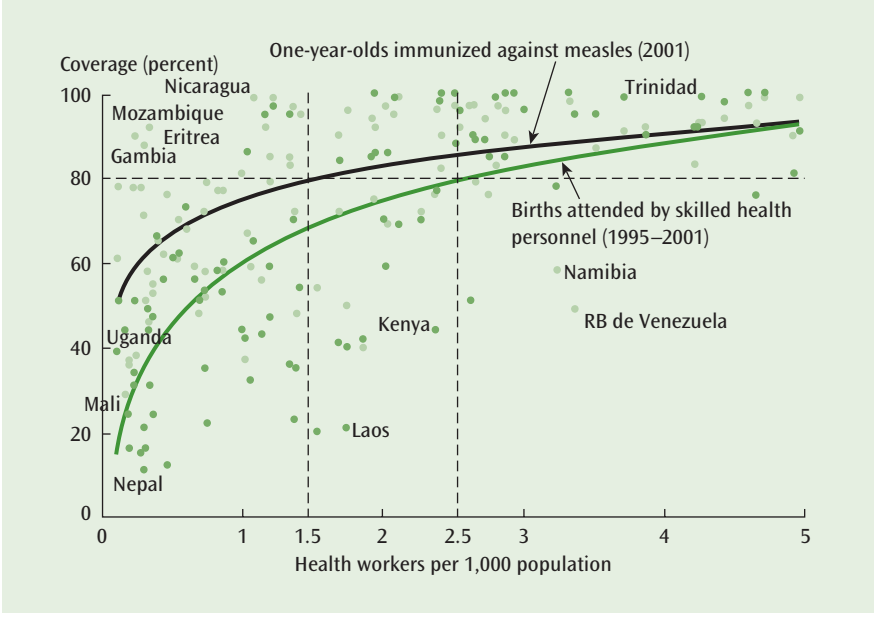
In education, health, water, and sanitation many of the interventions needed for better outcomes in developing countries are well understood. The International Water Supply and Sanitation Decade of the 1980s showed that scaling up investment is not difficult—far more challenging is ensuring the sustainability of systems, which is crucial for safe and continuous services. Building schools and health clinics is far less complex than developing and organizing the large workforces of skilled providers that must engage in face-to-face interactions with individual clients across highly decentralized networks. For most countries the two main implementation challenges to the health and education MDGs are scaling up skilled providers to achieve universal access to services and ensuring that providers perform effectively. The rest of this chapter focuses on these two issues and on a third with important links to both: the role of donor financing in supporting system expansion and leveraging better performance.

Scaling Up Skilled Providers

Student learning and patient health result from multiple complementary inputs, including school and clinic infrastructure, availability of books, drugs, and clean water, and family investments of time and energy, to study for exams or follow treatment instructions. But skilled providers—teachers, doctors, nurses—are the biggest expense in any social sector budget, as well as the most essential input for effective service delivery. Teacher costs average 75 percent of total education costs in developing countries, and health care salaries typically account for 60–75 percent of government health spending.[9] Policies governing the recruitment, training, salaries, deployment, and management of skilled education and health workers are core drivers of system costs, unit costs, resources available for complementary inputs, and outcomes.

Although there is considerable variation across countries, the number of health care providers is correlated with health service coverage. Countries with fewer than 1.5 health workers per 1,000 people are highly unlikely to have a measles immunization rate of 80 percent, whereas this rate is almost assured in countries with a health worker density of more than 2.5 (figure 3.8).[10] Countries with fewer than 2.5 health workers per 1,000 people are also less likely to have at least 80 percent of births attended by skilled personnel. In education the process of classroom instruction creates even tighter limits on the number of children that can receive "education services" for a given number of teachers. No country with less than 1 teacher per 70 school-age children has achieved universal primary enrollment.

FIGURE 3.8 Health service coverage increases with the number of providers



Source: Joint Learning Initiative 2004.

FIGURE 3.9 Provider presence is also associated with better health outcomes

Source: Calculations based on Anand and Barnighausen 2004.

The number of skilled providers is also important for health outcomes. A recent study of 83 countries found that a 10 percent increase in the number of trained health workers (doctors, nurses, midwives) per population unit is associated with a 2–5 percent decline in mortality, controlling for per capita income, poverty, and female literacy (figure 3.9) [11] Maternal mortality outcomes are the most sensitive to provider density, because skilled health workers can address a larger share of the conditions that lead to maternal mortality than the conditions that lead to infant or child mortality.

Although worker numbers are important, skill levels are key. In a rigorous study of primary education in the United States that controlled for students' innate ability and socioeconomic status, the teacher a child was assigned could affect his or her learning levels that school year by up to a full grade—a huge difference that dwarfs any other factor correlated with learning, such as books, facilities, class size, or teacher salaries.[12] And, important for policymakers, these large differences in teacher effectiveness were not well correlated with the formal measures usually believed to determine teacher quality, such as their level of education or years of experience. What counted was what teachers actually know and can do.

A recent large-scale learning assessment in Vietnam confirms this finding. The strongest predictor of students' performance on fifth-grade tests of reading comprehension and mathematics was their teachers' performance on the same tests. Not the teachers' salaries, training levels, or teaching conditions—but their mastery of the subjects being taught. A sobering finding was that the bottom 30 percent of teachers actually scored lower on reading comprehension than did the top 12 percent of fifth grade students.[13] Few developing countries have braved political pressures to measure teachers' subject knowledge directly, but those that have—including Brazil and Peru—have also found teachers' mastery of content to be a critical determinant of education quality.

Research also demonstrates the importance of provider quality in health. In 1992 Indonesian health centers were forced to cut incentive payments for rural doctors as part of a government effort to reduce the fiscal deficit. As a result, over the next several years there was a 30 percent decline in the average number of physicians per rural health center (from 1.8 to 1.2). Although patient visits were not affected, the quality of care was—and there was a 39 percent increase in child stunting in the affected regions.[14] Such severe malnutrition is likely to have long-term cognitive and productivity effects on the children involved and may generate cumulative economic costs that outweigh the short-term fiscal savings from the reforms.

Interestingly, the researchers in Indonesia evaluated providers not with formal measures such as level of education, but by observing how closely they followed best practices in diagnosing and treating patient conditions. The conclusion: As in the education research, what providers know and can do are crucial to quality services. Whether scaling up systems through new hiring or trying to improve existing education and health services, the most effective governments focus on screening and rewarding candidates for

competency, and avoid recruitment and advancement driven by clientelism, formal qualifications, or years of service alone.

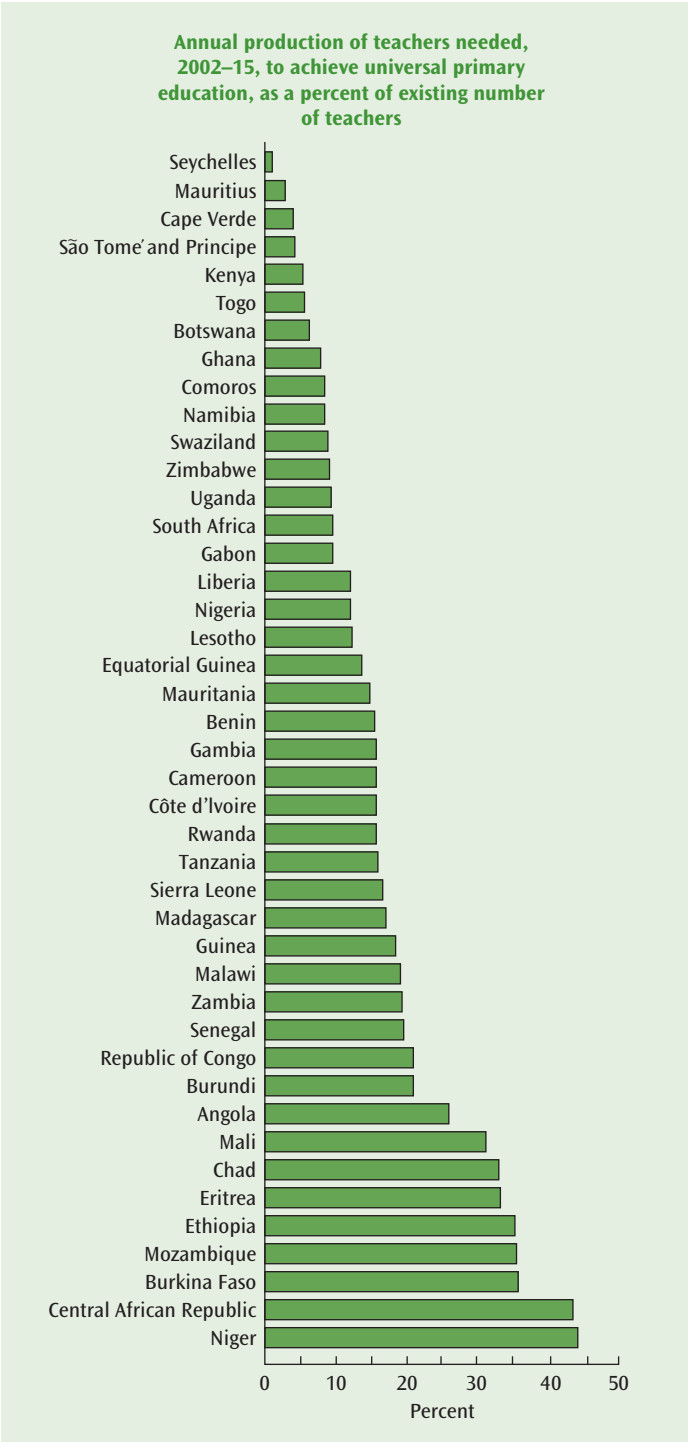
Are Human Resources a Binding Constraint?

The low-income countries furthest from the MDGs, many of which are in Sub-Saharan Africa, face major challenges in producing the number of skilled providers required to deliver the health and education services needed to attain the MDGs—even under optimistic assumptions about the impact of service delivery on outcomes. The Joint Learning Initiative, supported by the Rockefeller Foundation, the World Health Organization, and other health donors, estimates that for Sub-Saharan Africa to rise from its current ratio of 1 health worker per 1,000 people to a target level of 2.5, the region will need to add the equivalent of 1 million health workers between now and 2015.[15] Ethiopia will require an additional 150,000 workers, while the Democratic Republic of Congo and Nigeria will each need 90,000. Globally, about 4 million additional health workers will be needed, including 285,000 in Bangladesh.

Estimates of teacher requirements are also daunting, especially for Sub-Saharan Africa. To meet the needs for primary education alone, eight Sub-Saharan countries must produce at least 30 percent of their current stock of teachers each year until 2015 (figure 3.10). Two countries need to annually produce more than 40 percent of their current stock. In some countries annual requirements are more than 10 times current output from teacher training schools (figure 3.11).

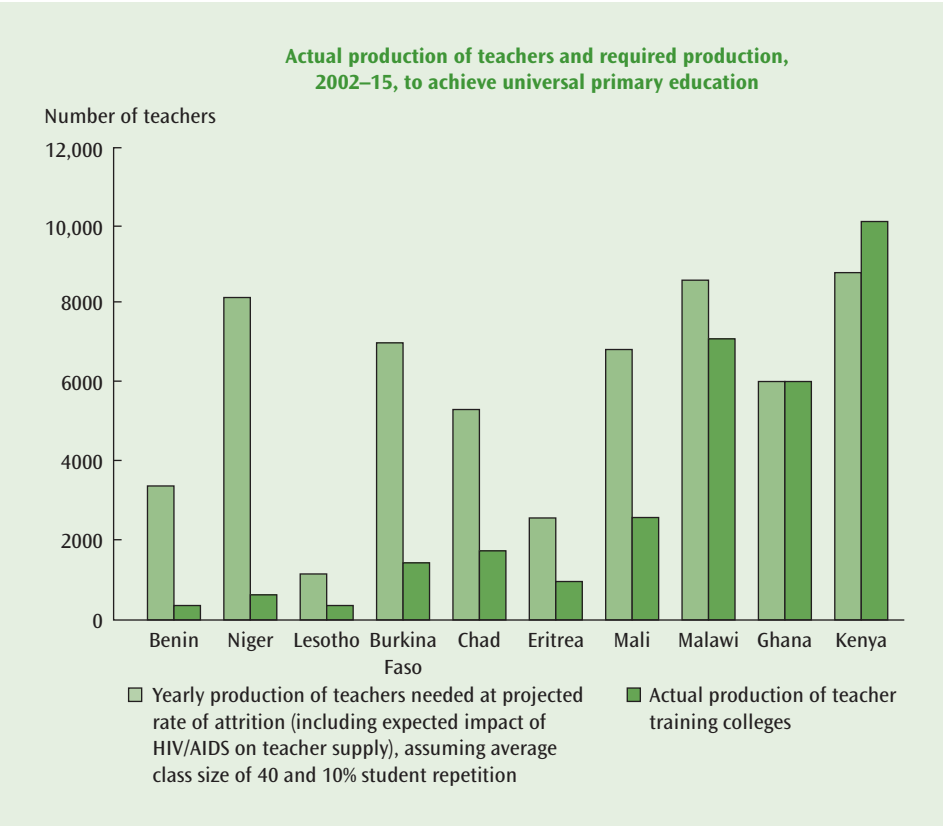
Clearly, in much of Sub-Saharan Africa the MDGs will not be attained with "business as usual" approaches to the production of skilled health workers and teachers. But in a growing number of countries, pragmatic changes in human resource policies have dramatically increased the number of skilled providers. Although not all cases have been equally successful in terms of provider and service quality, they demonstrate a range of

FIGURE 3.10 Projected primary teacher needs are large in Sub-Saharan Africa



Source: Calculated from EdStats data.
Note: Projected from 2001 data.

FIGURE 3.11 Projected primary teacher needs far exceed training capacity in many African countries



Source: Calculated from EdStats data.
Note: Projected from 2001 data.

strategies for rapidly shifting the production curve for skilled providers. In several cases sector efficiency has also improved, because new recruitment strategies have lowered costs per beneficiary served. And a few cases show that rapid expansion of quantity can be managed with attention to quality.

Core Strategies for Scaling Up Providers

Three basic strategies can be used to rapidly increase a country's production of education and health workers:

- Expand training capacity and/or adapt recruitment standards and training processes.
- Manage international migration, either by importing skilled workers or curbing outflows of nationally trained workers.
- Increase retention, by drawing retired or unemployed workers back into the workforce or by improving the health of sick workers, such as with antiretroviral treatment for employees with HIV/AIDS.

The first of these strategies has generated the most dramatic progress: In a wide range of countries, adapted standards and reengineered training processes for teachers and health workers have set the stage for rapid expansion of service delivery. The second strategy applies much more to health than to education, given the international market for health workers.

The third strategy, while important, offers limited quantitative prospects in most contexts.

ADAPTING RECRUITMENT STANDARDS AND TRAINING PROCESSES

The time lag and costs involved in expanding traditional medical, nursing, and teacher training schools have led a number of developing countries to seek alternative ways of scaling up basic health and education personnel. In education the most common approach is to set new standards for teaching that do not require graduation from a pedagogical institute—even though in some cases more years of general education may be required. In health, waiving or shortening medical schooling for doctors is generally unacceptable, so the main strategy is to leverage available doctors and nurses better with paraprofessionals. These paraprofessionals—often called community health workers—are trained for periods ranging from three months to two years and can provide many primary and preventive health care services. In countries with severe shortages of higher-skilled professionals they may even perform duties normally performed by physicians, as China's "barefoot doctors" did in the 1960s.[16] An important advantage of community health workers—and of alternative or community teachers—is that they are willing to work in rural areas, where it can be difficult to attract highly trained personnel. Community health workers are also less likely to migrate out of the country.[17]

Bangladesh, China, Cuba, The Gambia, Ghana, India, Madagascar, Mozambique, and South Africa are among the many countries that have trained community health workers to scale up delivery for a wide range of services, including malaria prevention, immunizations, family planning, tuberculosis treatment, and home visits to provide neonatal care. In many cases these efforts have substantially increased coverage, generated measurable improvements in outcomes, and dramatically lowered unit costs. In rural Maharashtra, India, infant mortality was cut in half—from 76 to 39 per 1,000 live births—between 1995 and 1998 by a program that trained village health workers to visit new mothers and monitor infants' weight and health for the first month of life. In control villages infant mortality declined only from 77 to 75 per 1,000 live births.[18]

Since 1991 South African tuberculosis patients treated by community health workers have actually achieved better health outcomes than those treated by more skilled personnel; 88 percent of patients seen by community health workers completed the full course of treatment, compared with 79 percent of patients seen by fully trained doctors and nurses. As a result the directly observed treatment strategy (DOTS) for tuberculosis implemented by community health workers was as effective as hospitalization or sanatorium care—at less than half the cost.[19]

The Planned Parenthood Association of Ghana trained community members to provide health education and family planning support to women in their communities. In villages covered by the program, family planning use reached 25–44 percent, far higher than the rural average. Immunization rates were 74–87 percent, compared with 30 percent in control villages. Moreover, village women who received support promoted maternal and child health and family planning in neighboring villages. The results point to a low-cost strategy for improving maternal and child health.[20]

Drawing on these experiences and the evidence on cost-effectiveness, several African countries are rapidly scaling up training of paraprofessional health cadres. Over the next five years, for example, Ethiopia plans to train 20,000 health extension workers to staff rural health posts throughout the country.[21] However, not all country efforts to realign the skills mix in health have been evaluated carefully, and clearly not all skills can be substituted. A significant number of programs—particularly those where paraprofessionals have not been paid or supported with basic equipment, drugs, and backup—have been unsuccessful.[22] But with adequate supervision, reasonable remuneration, and simple support systems, there is great potential for community health workers to help expand service delivery at basic levels of quality.[23] Medical schools are

rare in Sub-Saharan Africa, with 6 countries having none and 21 having just one.[24] For countries such as these, at least over the short to medium term—as production of doctors and nurses expands—there appears to be little alternative but to leverage the skills of fully trained professionals with judicious use of community health workers.

In education a number of countries have shown the potential for alternative teachers to help accelerate expansion of primary schooling. Even countries where the annual production of teacher training institutes is small often have large pools of unemployed university graduates who can be recruited into teaching. In West Africa this strategy has led not only to a large increase in primary enrollments over the past decade, but also to rising average levels of teacher education. Guinea—which over the past decade has achieved one of the world's most impressive increases in primary school completion—is a good example.

In 1998, under a project supported by the World Bank, Guinea experimented with two alternative changes in recruitment standards for primary teachers. Under one variant preservice teacher training was shortened from two years to a staggered program involving three months of initial training, eight to nine months of on-the-job training, and a final three months of formal training. The second variant involved eight months of formal training followed by eight to nine months on the job. For both alternatives the pre-training education requirement was increased from grade 10 to grade 13 (grade 12 for women).

The two new programs enabled Guinea to increase annual teacher production from 200 to 2,000 a year—a 10-fold increase that has had a similar impact on enrollment growth. Moreover, the benefits were not all quantitative: Controlling for socioeconomic and school factors, students of the new teachers performed better than those of traditional teachers on a recent study of learning achievement in francophone countries.[25] Guinea's experience suggests that adjusting teacher recruitment standards to emphasize content mastery (through a higher level of general education), and complementing this with relatively short-term training focused on practical classroom techniques, can be more efficient than expanding traditional teacher training institutes.

A similarly pragmatic strategy enabled Madhya Pradesh, India, to eliminate its backlog of children out of school in just 18 months, at one-third the usual cost.[26] The state reduced the education level required to teach in rural schools and gave villages funding to directly hire local secondary school graduates. These changes eased constraints on teacher supply and permitted rapid expansion of access; in 1997 the state opened 40 new primary schools a day. A key similarity with the Guinean program was the emphasis placed on supporting these new teachers in service, with materials and regular supervision, as a cost-effective alternative to formal pre-service training.

These two examples—and similar earlier reforms in countries ranging from the Republic of Korea in the 1950s to Indonesia in the 1970s and Zimbabwe in the 1980s—demonstrate that with pragmatic strategies to adapt recruitment standards and restructure training, teacher production can be scaled up 10-fold or more in just one or two years. In recent years virtually all countries with very low primary completion rates have begun pursuing such policies, and in none has the supply of potential teachers been a constraint. On the contrary, even when offering average salaries as low as half the civil service teacher wage, countries have found more qualified applicants for contract teaching positions than they can afford to hire. In Benin, where the national training institute produces only 100 teachers a year, 6,500 university graduates recently applied for 1,000 new contract positions. In Senegal, which in 1998 became the first West African country to introduce contract teachers, there were 35,000 applicants for the first 6,000 positions. In Niger teacher production has quadrupled since 2001, when teacher training was shortened from two years to one and contract teachers

were introduced. The experience has been the same in Ethiopia, Mali, Togo, and elsewhere.

Do the adapted standards affect quality? While more research is needed, the best answer at present is that the results have been mixed. In many countries the adoption of new standards has been driven as much by fiscal constraints on hiring teachers at prevailing civil service standards and wage scales as by an absolute shortage of skilled (or skillable) personnel. Alternative teachers are often hired under new contracting arrangements that provide less job security and, in many cases, a direct role for communities in creating contracts and monitoring performance. These multiple variables can make it difficult to disentangle whether changes in teacher behavior and student learning outcomes reflect differences in teacher skills or differences in motivation. In contrast to the results from Guinea, a study of fifth graders in Togo showed slightly lower learning by students of contract teachers, controlling for other factors.[27] But it is important to remember that in most cases—and especially for poor children in rural areas—the alternative to contract teachers is not a formally trained civil service teacher, but no schooling at all.

Changes in teacher contracting and the training of paraprofessional health workers have met resistance from labor unions. Indeed, one of the most difficult aspects of launching such reforms may be the political economy of maintaining two-tier salary systems over time. African teacher unions have been vocal critics of the use of contract teachers and are trying to organize these workers to demand higher salaries.

But the magnitude of human resource shortfalls in these sectors leaves governments committed to universalizing education and basic health coverage—committed, that is, to achieving MDG targets—little choice but to make these pragmatic adjustments, evaluate them carefully, and upgrade provider quality over time. It is encouraging that the long-term evidence in education suggests that, controlling for country income, countries that achieve universal coverage sooner, even by adapting teacher standards, achieve higher average levels of student learning.[28] The keys to success are likely to be countries' ability to screen new candidates carefully, train them effectively, equip them adequately with well-designed teaching manuals and treatment protocols, provide ongoing, cost-effective, in-service support and supervision, monitor and reward performance effectively, and gradually raise standards over time. In education that has been exactly the approach taken over a 40-year span by countries, such as the Republic of Korea and Singapore, that have made the transition from low-income status and low average education levels to sustained economic growth and high-performing education systems.

MANAGING MIGRATION

A confounding issue for developing countries trying to scale up health services is the globalization of the health care workforce, as migration flows increase throughout the world. While the national specificity of a curriculum makes teacher migration relatively rare, the past decade has seen an explosion in the migration of physicians and nurses from developing to developed countries.[29]

Such outflows have reached troubling levels in several developing countries, when compared with the size of the health workforce and the output of local training institutions. There are allegedly more Nigerian doctors in the New York (United States) area than in Nigeria, and more Malawian doctors in Manchester (United Kingdom) than in Malawi. Of the more than 600 physicians trained in Zambia since its independence, only 50 remain in the nation's health system. Of the 489 students who graduated from the Ghana Medical School between 1986 and 1995, 61 percent have left Ghana—with more than half going to the United Kingdom, and just over a third to the United States.[30] A third of Ethiopia's physicians left the country between 1988 and 2001. And in 2003, 7 percent of Zimbabwe's public sector nursing force migrated to the United Kingdom alone.

While migration brings significant benefits in terms of remittances, networks, and technology transfers, for most Sub-Saharan countries it also creates a loss of skills that the region can ill afford. There are relatively few countries in the region where the labor market cannot fully absorb graduates of medical training programs. In Malawi, for example, vacancy rates for funded positions in the public health system are 25 percent for nurses and as high as 80 percent for specialists, and in Zambia, 40 percent of funded public sector health positions are vacant. Yet, at the same time, in both countries skilled providers are leaving the public system. The key constraint on the use of available funding appears to be the public sector's inability to selectively increase wages in health to more competitive levels without creating broader civil service wage pressures.

The pull from developed countries is expected to grow. In the United States an estimated 126,000 nursing positions are unfilled, and the shortage is projected to hit 500,000 by 2015. The United Kingdom will require an additional 35,000 nurses by 2008.[31] Given the enormous compensation differences between developing and developed countries, what can developing countries do to manage migration?

Policies currently being tried include bonding, mandatory community service, diaspora exchange programs, and ethical recruitment guidelines, such as the Commonwealth Code of Practice adopted in 1999 in the United Kingdom. While the general consensus is that these efforts have had little impact,[32] Thailand has had some success in attracting back medical professionals. The government's "reverse brain drain" strategy has involved relaxing licensing requirements and offering generous research funding and monetary incentives.[33] A few other countries, most notably Ghana, are trying reverse migration strategies; in the early 1990s they began recruiting Cuban doctors and senior allied health professionals. The number of Cuban doctors recruited to Ghana increased from about 60 a year in the early 1990s to more than 200 a year in 2003. The doctors provide services, mainly in rural areas, for two years.[34]

There is no simple solution, and actions are needed by both developed and developing countries. Donor countries can help by trying to attract more of their own citizens into nursing, for example, by raising wages; the British government recently did this. Donors can also help finance the expansion of medical training in developing countries, recognizing that some share of graduates will inevitably migrate. Developing countries need to keep salaries in public health systems as competitive as possible, and donor countries can help finance salary increases through development assistance. Finally, developing countries can make medical and nursing students finance their studies with loans and, if a student migrates before the loan is repaid, work with the receiving country to recoup the balance through that country's tax system.

INCREASING RETENTION

To boost human resources, several countries have explored recruiting retired, inactive, or unemployed workers back into the labor force and in some cases allowing flexible, part-time employment. Since 1994 public hospitals in Thailand have recruited retired physicians to work part time.[35] Ghana is also experimenting with such policies. Up to two-thirds of retiring doctors and nurses apply to the Ghana Health Service to be reengaged after retirement. The first contract period lasts two years, and is renewable for two more years and an additional year until the age of 65.[36]

Countries facing human resource shortages must also actively protect the health of existing providers, particularly those with HIV/AIDS. In low-income countries disability and death typically account for less than 10 percent of attrition among health care providers. But in Southern African countries such as Malawi, where HIV/AIDS prevalence has reached 15 percent among 15–49-year-olds, death accounted for 58 percent of the attrition of Ministry of Health personnel between 1990 and 2000—with a substantial proportion due to AIDS.[37] Data are scarce,

but in the highest prevalence countries the annual death rate from AIDS is estimated at 4–5 percent for education workers and 2–3 percent for health workers.[38] Surveys of supervisors indicate that absenteeism linked to AIDS, both from sickness and attending funerals, is also a serious issue. Most employers estimate that the costs of absenteeism are even higher than the costs of training and recruitment to replace staff lost to AIDS.[39]

The key operational implication is that human resource management and planning—even in relatively low-prevalence settings—must address the impacts of HIV/AIDS. The disease tends to exacerbate weaknesses in human resource management and planning, and few countries have implemented systems that respond effectively to the additional strains that the epidemic places on the supply of services. Fewer than 5 of 30 ministries of education in Sub-Saharan Africa have built HIV/AIDS indicators into their management information systems or included projections of the disease's impact in their models of future human resource needs. Many countries also lack workplace policies that ensure access to prevention, antiretroviral therapy, and other support and treatment, mitigate the impacts on infected staff, and provide clear backup arrangements for staff absences. Most crucial is to protect health workers from job-related exposure to infection through appropriate training, enforceable safety policies, and adequate supplies and protective gear—and to give these workers first call on antiretroviral therapy.

Deploying Providers to Underserved Areas—A Separate Issue

In both the developed and developing world, even when overall numbers of education and health personnel balance needs, there can be wide variations in the quantity and quality of service delivery across regions. Almost always, these variations result from difficulties in deploying and retaining workers in rural areas. Although 66 percent of Ghana's population lives in rural areas, for example, only 15 percent of its physicians work there.[40]

Several countries have analyzed the factors influencing the willingness of service providers to locate in remote areas. While salary compensation is one factor, other factors are just as important. But virtually all the relevant factors imply higher costs for governments. Nonfinancial concerns include the intellectual and social isolation that highly qualified staff can feel in remote rural communities, lack of amenities such as electricity and telephones, primitive accommodations, limited transportation availability and difficulties in maintaining contact with family and colleagues, an absence of professional support and development, lack of quality education options for children, and a mismatch between an individual's professional training and the skills required on the job.[41]

Countries that have succeeded in implementing multipronged strategies to provide rural services include Indonesia, which posted tens of thousands of primary school teachers to rural areas in the 1970s and thousands of skilled doctors to remote provincial clinics in the 1980s, and Thailand (box 3.4). Ethiopia, Guinea, Mauritania, and Niger provide allowances for teachers in deprived areas, and Niger has also introduced allowances for teachers in nomadic schools. The premium over the average salary varies, but in these cases is 15–40 percent. Experiences from these and other countries permit several cautious conclusions about the keys to success:

- Rural and other hardship allowances should be linked to the position, not the person. If a teacher leaves a rural post, he or she should not continue to receive the premium.
- Allowances should be calibrated to regional conditions, but differentials should be transparent and based on observable characteristics.
- Criteria for and levels of allowances must be reevaluated periodically. In Bolivia, failure to do this has led to a large share of rural hardship allowances going to schools in areas that have actually become urban over time.

BOX 3.4 Attracting doctors to rural areas in Thailand

Over the past 30 years Thailand has achieved universal coverage of basic health services and sustained improvement in health outcomes. At the heart of this success are three decades of policy efforts and incentives aimed at expanding health services and attracting doctors to rural areas. Thailand's experience illustrates the need for a multipronged approach and confirms evidence from other countries that financial incentives are not always the most important component of such efforts.

In the early 1970s Thailand introduced a bonding system that offers medical students heavily subsidized tuition if they promise to work in the public sector for three years upon graduation. Students who decline the program have to pay full tuition, which is quite high, and doctors who breach the contract must pay a large fine. During that period the government also began putting priority on rural health infrastructure, as part of a national rural development effort. Expansion of urban hospitals was halted, while rural hospitals and health centers grew significantly. So did the availability of paramedics, drugs, equipment, supplies, housing, and other amenities in rural areas.

A further reform aimed at strengthening rural service delivery began in 1994, when medical schools began increasing recruitment of students from rural areas. By 2001, 32 percent of medical students were from rural areas, up from 23 percent in 1994. Medical training was also changed, to increase exposure to rural practice, and rural doctors were given priority in continuing education programs. Experience in rural public service is now a prerequisite for residency training programs, and doctors with more than five years of rural experience can apply for a Thai board certificate—the equivalent of a doctorate.

Rural doctors receive hardship allowances, with the largest allowances going to the most remote districts. In addition, each year a rural hardship award is presented to the best doctor from a remote area, as is a rural doctor of the year award.

Since the early 1970s the difference in density between doctors in rural areas and Bangkok has been cut in half, from 1/20th to 1/10th—a dramatic improvement equaled by very few countries. In addition, the proportion of outpatient visits to public health facilities occurring in rural areas has increased from 54 percent to 82 percent. After their compulsory three-year contract expires, two-thirds of doctors in rural areas remain there. During the late 1990s an economic boom led many doctors to breach their public contracts (paying a large fine) to work in the private sector. But doctors with rural training were least likely to do so.

Source: Wibulpolprasert and Pengpaibon 2003.

As a general strategy, recruiting individuals from rural areas into service or training programs is a more effective way to increase retention and improve service delivery than trying to rotate individuals trained in urban areas to rural settings.[42] Recent research in western Kenya shows interesting results in this respect. Since early 2004 a pilot program has enabled schools to hire additional teachers for grade 1, to cope with increased enrollment after Kenya's introduction of free primary education. Teachers are hired locally, at about one-fifth the cost of civil service teachers. Once a month a team of nongovernmental organization (NGO) researchers visits schools unannounced and records attendance of grade 1 teachers and pupils. In the first year of the program, in schools that received the funding, attendance averaged 90 percent for locally hired teachers and 73 percent for civil service teachers. Locally hired teachers were also more likely to be in class when the researchers arrived—71 percent compared with 46 percent for regular teachers. Finally, the program seems to have had beneficial effects on school accountability and performance: Average teacher attendance in the program schools is 78 percent, compared with 71 percent in nonprogram schools.[43]

In sum, in many developing countries the magnitude of doctor, nurse, and teacher shortfalls relative to ambitious MDG targets

calls for pragmatic strategies for scaling up providers that represent a sharp change from traditional training systems. Such strategies include changes in recruitment standards to permit faster production of providers, maximum use of complementary, less skilled workers to leverage scarce skills, attention to international migration pressures, and incentives or rural recruitment strategies to ensure service delivery in rural areas. These strategies have enabled some countries to achieve impressive scale-ups of human development services. In some cases it appears that the supply of trained or trainable human resources could support even faster production or hiring. The next section examines financing issues that affect the scaling up of human development services.

Ensuring Sustained and Predictable Financing

The challenge of achieving the MDGs at minimum global cost implies four distinct lines of action, aimed at both minimizing costs and maximizing the efficiency of financing:

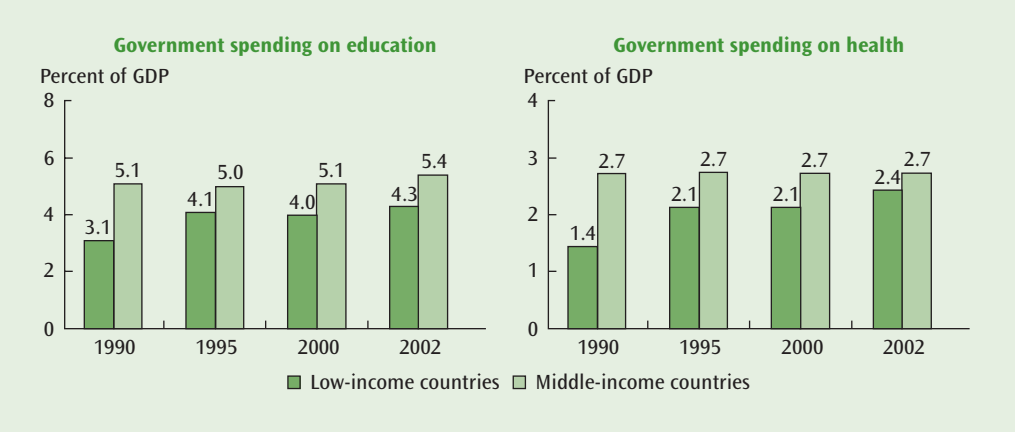
- Lowering the marginal costs of expanded service delivery as much as possible, especially through human resource strategies such as those discussed above, to leverage scarce skills and expand provider cadres at sustainable unit costs.
- Increasing the efficiency of service delivery, the focus of the next section.
- Increasing domestic financing for education, health, water, and sanitation in countries where fiscal allocations for these sectors are low, to minimize aid dependency.
- Mobilizing efficient donor support to fill remaining financing gaps.

Trends in Developing Countries' Spending

Between 1990 and 2002 low-income countries significantly increased their spending on education and health. In both sectors spending as a share of GDP started from a low base—3.1 percent of GDP for education and 1.4 percent for health—but it has grown by more than 40 percent in education and 70 percent in health (figure 3.12). There is little question that delivery of human development services has become a higher priority in many poor countries.

By contrast, spending shares in middle-income countries have remained relatively flat. These countries started the 1990s with much higher levels of GDP devoted to education and health than low-income countries, but the gap in health has nearly closed and in education it has narrowed considerably.

FIGURE 3.12 Low-income countries are spending more on health and education



Source: IMF data.
Note: Unweighted averages based on corresponding available data from 1990–2002.

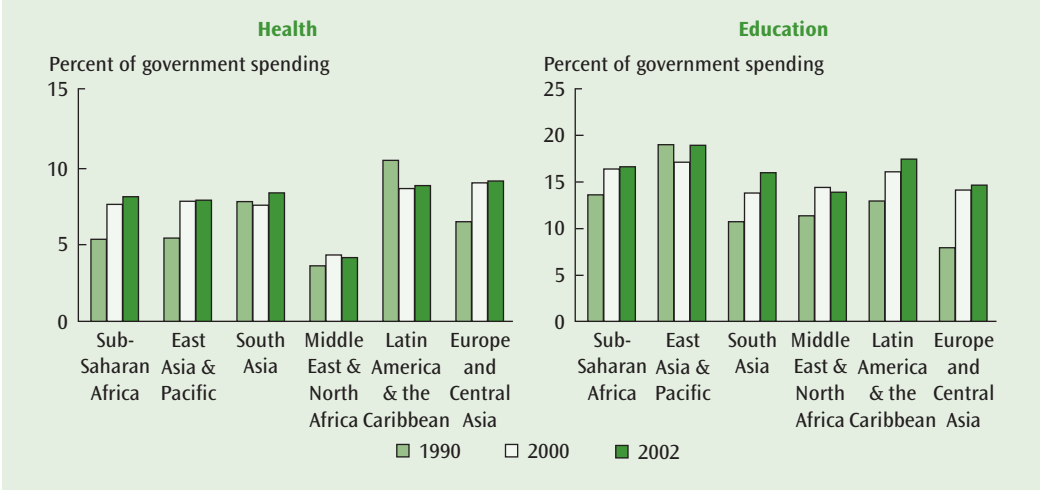
Education and health spending also accounts for a growing share of government budgets in low-income countries. Between 1990 and 2002 education rose from an average of 12 percent to 14 percent of government spending, and health increased from 5 percent to 7 percent. The upward trend has been most pronounced in Sub-Saharan Africa, South Asia, and Europe and Central Asia, and more consistent in education than health, but overall it reflects increasing fiscal shares for the two sectors (figure 3.13). In Sub-Saharan Africa these trends show the benefits of debt relief. A recent study of African heavily indebted poor countries found that between 1998 and 2002 their spending on education and health increased by 1.9 percentage points of GDP, while debt payments as a share of GDP fell by 1.4 percentage points.[44]

At the country level, however, there is wide variation in fiscal efforts for human development. In Sub-Saharan Africa education spending averaged about 4.9 percent of GDP in 2002—but ranged from less than 2 percent in Burkina Faso and Guinea to more than 10 percent in Botswana and Lesotho. In health the regional average was 2.7 percent of GDP, but Burundi and Madagascar spent less than 1 percent, while Eritrea, Lesotho, and São Tomé and Principe spent more than 5 percent. In many countries human development spending appears to be below what they could afford.

In health, though, public spending is only a small part of the story. In low-income countries as much as 70 percent of health spending is private, out-of-pocket payments to private providers. In general, as country incomes increase, both the private share of health spending and the share of private spending that is out-of-pocket—rather than for health insurance—tend to decrease. The mix of these sources has important implications for health system access, equity, and financial sustainability.

Broadly speaking, these financing trends are encouraging. Still, spending falls well short of needs. Progress on MDG outcomes needs to be accelerated for some goals in every region—and in Sub-Saharan Africa, for every goal. Even with significant increases in fiscal effort for health, in recent years slow GDP growth and rapid population increases have translated into declines in per capita public spending in several regions, most dramatically in Sub-Saharan Africa (table 3.1). If South Africa is excluded, rather than $12 per

FIGURE 3.13 Budget shares for health and education have increased in many regions



Source: IMF data.
Note: Unweighted averages based on corresponding available data from 1990–2002.

capita in 2001, the region's public health spending drops to $6 per capita.

Many low-income countries require substantially increased domestic financing and external aid if they are to achieve the MDGs. For middle-income countries, although not all are on track to all the goals, the case for incremental aid is less compelling—given these countries' higher fiscal capacity, closer proximity to MDG targets, and more developed health, education, and water supply and sanitation systems.

TABLE 3.1 Public health spending per capita has fallen in some regions (current U.S. dollars, weighted by population)

Region	1997	1998	1999	2000	2001
East Asia and Pacific	15	15	16	17	19
Europe and Central Asia	100	90	77	84	89
Latin America and the Caribbean	131	132	120	125	122
Middle East and North Africa	59	61	61	66	69
South Asia	4	5	5	5	5
Sub-Saharan Africa	17	15	13	13	12
High-income countries	1,596	1,609	1,694	1,714	1,763
World	274	274	284	285	294

Source: WHO 2004.

External Financing Requirements

Numerous studies have estimated the incremental costs and external financing needed to reach the MDGs. These estimates have varied widely because of the sensitivity of cost estimates to assumptions about spending efficiency, the difficulty of factoring in the impacts of synergies from progress on other MDGs, and the sensitivity of global aid requirements to assumptions about countries' own fiscal efforts in pursuit of the goals. Estimates of external financing needs are also sensitive to assumptions about the efficiency of aid in filling estimated funding gaps, an issue that has received less attention.

Table 3.2 summarizes the best available estimates of incremental spending requirements for the health and primary education MDGs. While the range is large, even the most conservative estimates of the external financing gap indicate the need to double or triple current levels of official development assistance (ODA) for health and primary education.

Investment needs in water supply and sanitation must be added to these requirements as well, because expanding these services is essential to achieving health and education goals. The overall incremental financing needs for infrastructure investments related to the MDGs (including water and sanitation) are discussed in chapter 2. It is estimated that to achieve the MDG target for water supply, annual investment must increase from $9 billion to $12 billion—and for sanitation, from $4 billion to $18 billion. Thus annual investment in water and sanitation needs to double. Roughly one-third of this investment is needed in East Asia and the Pacific, close to one-third in South Asia, and nearly one-fifth in Sub-Saharan Africa. Even if progress in increasing private participation continues, the bulk of this financing will have to come from the public sector and ODA.

In all these sectors there is significant scope for lowering unit costs and increasing domestic financing for the MDGs in many countries. But several costing studies have examined this potential carefully and concluded that even with major increases in spending efficiency, a significant financing gap will remain.[45] The estimates of investment needs in water and sanitation presented above, for example, assume that investment and operating efficiency will be higher than in the past, due to reforms of sector management being implemented in many regions. The Bruns, Mingat, and Rakotomalala (2003) study of the costs of universal primary completion goes even further. Not only does it model improvements in unit costs and spending efficiency to best practice levels for all low-income countries, it also models

TABLE 3.2 Significant additional financing is needed to achieve the health and primary education MDGs

Countries covered	Additional financing needed annually	Additional external financing needed annually	Source of estimate
Health goals			
83 low-income countries	$57 billion (2007)–$94 billion (2015)	$22 billion (2007)–$31 billion (2015)	WHO 2001
135 developing countries	$25–70 billion	Not estimated	Preker and others 2003
155 developing countries	$30 billion (2006)–$50 billion (2015) [a]	$18 billion (2006)–$33 billion (2015)	UN Millennium Project 2005[a]
151 developing countries	$20–25 billion	$15–25 billion	Devarajan, Miller, and Swanson 2002
Universal primary completion			
79 low-income countries	$9.7 billion	$3.7 billion [b]	Bruns , Mingat, and Rakotomalala 2003
79 low-income countries	Not presented	$5.7 billion	UNESCO 2002
155 developing countries	$33–38 billion	$5–7 billion [c]	Bruns , Mingat, and Rakotomalala 2003
151 developing countries	$10–30 billion	Not presented	Devarajan, Miller, and Swanson 2002
155 developing countries	$9.1 billion	Not presented	Delamonica, Mehrotra, and Vandemoortele 2001
155 developing countries	$9 billion	Not presented	Naschold 2002
155 developing countries	$5–6 billion	Not presented	Colclough and Lewin 1993

a. UNMP (2005a) does not provide a disaggregated estimate of global financing requirements for health. The amounts here are rough pro-rated estimates based on its five country studies, which do show the health share of MDG costs.
b. Total, not incremental, external financing requirement. Bruns , Mingat, and Rakotomalala (2003) estimate that baseline external funding for primary education to IDA-eligible countries is $1 billion a year.
c. Total, not incremental, external financing requirement. Bruns , Mingat, and Rakotomalala (2003) do not provide a baseline estimate of external funding for primary education in middle-income countries.

increases in all countries' fiscal efforts to a best practice norm (about 20 percent of the recurrent budget and 4 percent of GDP devoted to education, with half for primary). But even under these best case assumptions, the study estimates an external financing shortfall of nearly $4 billion a year for low-income countries to reach the 2015 goal, and a gap of $5–7 billion a year for all developing countries.

As part of the Abuja Declaration in 2000, African governments agreed that funding for health should increase to 15 percent of their budgets, up from the current average of 8 percent. World Bank simulations for a sample of five African countries indicate that even if this spending target were achieved from 2005 on, countries would still not be able to finance the increased recurrent salary and other costs associated with scaled-up service delivery (to a target level of 2.5 providers per 1,000 population) by 2015 out of domestic resources alone. Indeed, for a few of the countries, projected external financing needs would not decline significantly until after 2020.

In sum, the incremental aid requirements estimated in even the most conservative studies are large. But for the social sectors in particular, as important as increasing the quantity of aid is the need for profound changes in its quality. The additional public spending needed to scale up human development service delivery is largely for recurrent costs, especially personnel. This spending will need to be sustained and increased over time—in many countries for a 10–20-year horizon. There is a near-complete disconnect between this core need and the nature of donor assistance to these sectors today in three major respects: aid flexibility, aid predictability, and transaction costs.

AID FLEXIBILITY

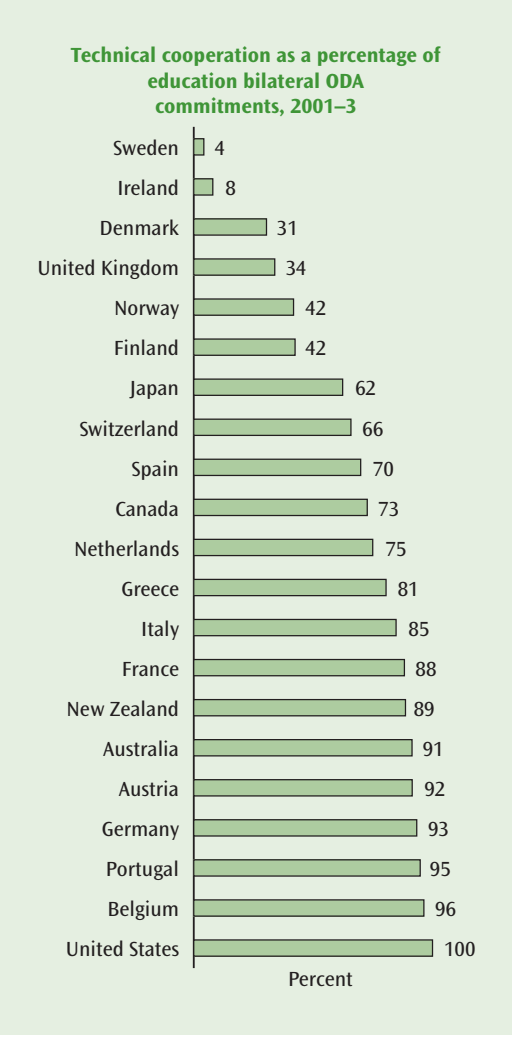
The financing gaps in health and education are for core budget expenses—largely local costs, largely recurrent, and largely for personnel.

But a high share of aid to these sectors comes pre-packaged in the form of technical assistance. About 70 percent of ODA for education is extended as technical assistance—much higher than the 30 percent share for ODA in general. From 2001–3, 10 bilateral donor countries devoted more than 80 percent of their ODA for education to technical assistance (figure 3.14).

This picture may be slightly exaggerated because some donors have difficulty isolating the nontechnical cooperation inputs of agencies that predominantly extend technical cooperation. It may also be improving somewhat, with the U.S. Millennium Challenge Account expected to start disbursing in 2005. Still, the bulk of aid for education cannot be used to pay the public sector workers that are the number one requirement for scaling up education services. No matter how important or even crucial the training, scholarships, technical advisors, and studies supported by current education aid flows may be, they do not offset the estimated financing gaps. Virtually all education MDG costing exercises have focused on the inputs that are most straightforward to cost, such as teachers, classrooms, books, student stipends, and other direct system operating costs. From the standpoint of filling those gaps and producing MDG results, the current pattern of education assistance represents a very inefficient transfer.

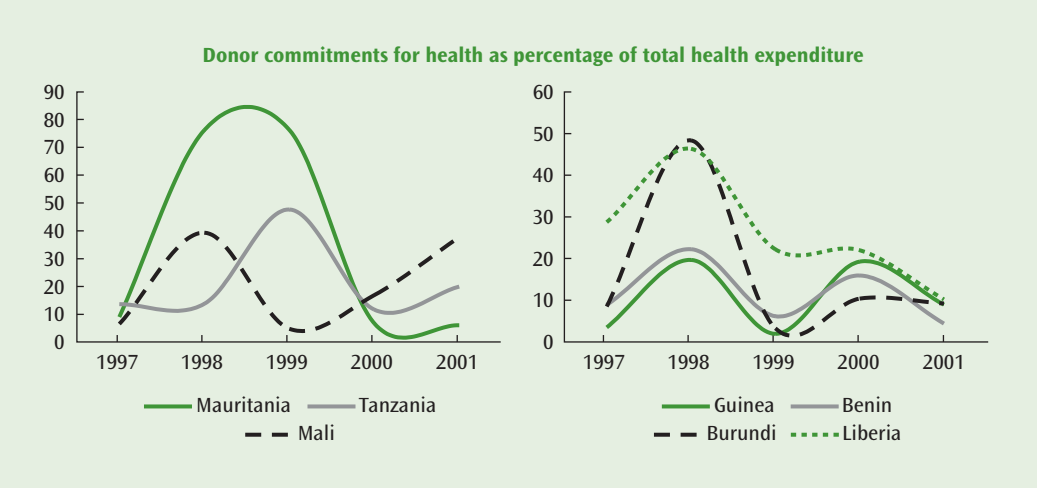
Although multilateral lenders such as the World Bank's International Development Association (IDA) report lower shares of funding for technical assistance, their funding traditionally has not been available for personnel costs either. World Bank policy has treated financing of recurrent costs as exceptional and allowed it only on a declining basis. Between fiscal 2001 and 2004 the share of Bank investment lending used to finance recurrent costs averaged just 4–6 percent. Recognizing the constraint this policy could impose on achieving the MDGs, in 2004 the Bank's Executive Directors approved a new policy on eligibility of expenditures in investment lending, including recurrent cost financing. Under the new policy, financing of recurrent costs need not be considered exceptional or occur on a declining basis. But decisions on the use of such financing must take into account its impact on the borrowing country's fiscal and debt sustainability, the country's commitment and ability to provide continued financing after Bank financing ends, and sustainability issues at the sector and project levels. The new policy is in its first year of implementation, so it is early to judge its impact. But it is expected to have a positive effect on the flexibility of IDA support for MDG-related projects.

FIGURE 3.14 Seventy percent of bilateral education aid is reported to be technical assistance



Source: Fast Track Initiative Secretariat based on OECD DAC data.

FIGURE 3.15 Donor commitments can oscillate substantially



Source: WDI and OECD DAC donor funding database and staff estimates.

Aid is also poorly targeted to the regions and countries furthest from the MDGs. ODA for water supply and sanitation, for example, is highly concentrated, with the 10 largest recipients receiving nearly half of all such aid in 1997–2001. In 2000–1 only 12 percent of aid to the water sector went to countries where less than 60 percent of the population has access to an improved water source—which includes most low-income countries.

AID PREDICTABILITY

A second issue is the volatility of aid flows. Bilateral aid commitments—which account for 70 percent of education ODA and 50 percent of health ODA—are relatively short-term (one-to-two year) commitments, and disbursements can lag or diverge substantially from commitment amounts. Ministries of finance have raised understandable concerns about taking politically irreversible personnel actions that have long-term fiscal costs, such as hiring additional personnel or adopting wage increases to retain personnel, if it is not clear that financing will be sustained. As can be seen from the pattern of donor funding commitments for health in seven different African countries, commitments can vary tremendously from year to year (figure 3.15). While it is true that commitments may be disbursed over several years, leading to a smoother pattern of disbursements, the volatility of commitments still impedes long-term fiscal planning.

Although low-income countries eventually need to be able to sustain their education, health, and water and sanitation systems with domestic resources—avoiding developing long-term dependency on aid—that goal can be achieved only gradually in most countries, with economic growth and deepening of fiscal capacity. In the short to medium term, countries face significant risks in expanding health or education systems in an environment where the level and continuity of donor support are largely unpredictable.

These issues are particularly acute in the lowest-income countries, which have a high degree of aid dependency and would grow even more aid-dependent in the period to 2015 under most scenarios for attaining the MDGs.[46] In health more than 30 percent of spending is already externally financed in 13 low-income African countries. In these countries (some of which appear in figure 3.15) aid volatility has pushed sector spending into inefficient stop-and-start patterns, constrained expansion, and disrupted service delivery.[47]

What is needed is both provision of more stable and predictable financing by donors and efforts by the recipients to gradually build their own fiscal capacities so as to reduce dependence on aid in the long term.

TRANSACTION COSTS

A third issue is the high transaction costs that countries bear in accessing foreign aid. Even small volumes of aid for small countries flow through hundreds of parallel bilateral, multilateral, and global program channels, each with its own negotiation, reporting, and administrative requirements. In 2000 the typical bilateral donor provided ODA to about 115 nations. Mozambique has more than 100 development partners in its health sector alone. It is sobering to recognize that, from the standpoint of a health minister, the volatile lines in figure 3.15 showing total external financing for health are actually composites of many different financing sources and disbursement patterns, each with its own volatility and administrative requirements.

Donors often require assistance to be kept in parallel budgets outside the ministry of finance, to facilitate their accounting of the direct impact of their aid. But aid is fungible, and the cumulative demands on recipients are heavy. Low-income countries are forced to allocate limited human resources away from managing service delivery to managing donors.

There is a growing view that because aid is fungible, donors should dispense with the notion that they can identify what their money buys and focus on the entire public expenditure program and sectorwide results. In Uganda donors' willingness to increase the share of funding channeled through the government budget in the context of a sectorwide approach to water has slashed transaction costs and sped implementation of rural and town water supplies. Donor support for water going through the national budget increased from 14 percent in 2000 to 44 percent in 2002 and will reach 70 percent in 2006. In parallel, Uganda's annual investment in water points and town water supplies has reached twice that of similarly sized countries.

In education, pooled donor support for single, agreed sector investment programs has been a major thrust of the Education for All Fast Track Initiative (see the next section). This approach is increasingly being discussed in health as well. Harmonization is also being advanced more generally through the Rome, Marrakech, and recent Paris meetings and ongoing work by OECD's Development Assistance Committee to implement country partnership and harmonization agreements.

Are Global Programs Advancing the MDGs?

Development assistance for health has risen steadily since 1990 and significantly since the MDGs were adopted in 2000 (figure 3.16). In contrast, support for education declined between 1990 and 2000, but increased by 35 percent in real terms between 2000 and 2003.

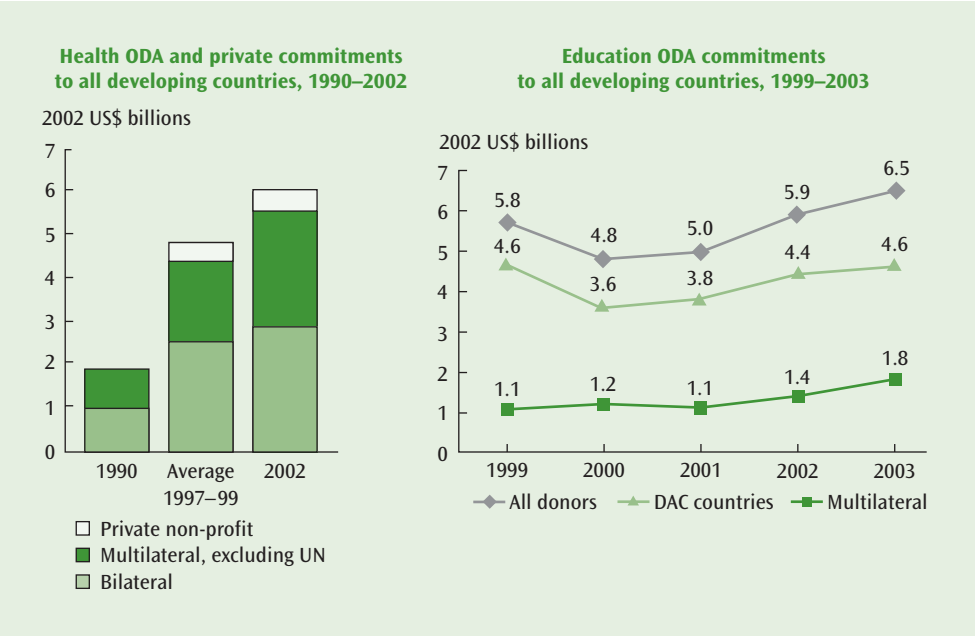
HEALTH

In health much of the post-2000 increase in ODA and private philanthropic funding (notably the Gates Foundation) can be credited to new global programs aimed at mobilizing global awareness and funding to eradicate major diseases. Major global programs in health include the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), the Global Alliance for Vaccination and Immunization (GAVI), the World Bank's Multi-country AIDS Program (MAP), the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), and some 70 other global health initiatives. The impact on HIV/AIDS funding has been particularly large: By 2003, almost 80 percent of public spending on HIV/AIDS in low-income countries was financed by external grants.[48]

These new global initiatives have transformed the landscape in the health sector. In just three to five years the programs have had three major achievements:

- *Raising global awareness of key diseases.* The global health initiatives have been very effective in drawing donors' attention to

FIGURE 3.16 Total ODA for health and education is increasing



Source: World Bank estimates from DAC database.

communicable diseases such as malaria, tuberculosis, and HIV/AIDS that are major killers in the developing world, as well as to less-known tropical diseases that disproportionately affect low-income countries—such as riverblindness, Chagas disease, and dengue fever. This advocacy has had a major impact on funding for malaria, tuberculosis, and HIV/AIDS, all of which are key for MDG progress. Some of the resulting partnerships, notably for river blindness, have also been catalysts for the cross-border collaboration needed to produce results. The global programs have played an equally important role at the country level, in encouraging developing country governments to revitalize programs for these sometimes neglected diseases. Finally, they have helped improve the delivery of interventions, often by contributing drugs.

- *Stimulating new drug and vaccine research.* The global health initiatives have used innovative approaches and market power to stimulate research on the drugs and vaccines needed by developing countries; they have also stimulated production and helped lower prices. In noncompetitive markets, such as those for vaccines against childhood illnesses, guarantees of future purchases and sharing of risks with producers have been used by the Global Alliance for Vaccines and Immunization (GAVI), for example. In competitive markets, programs such as the Tuberculosis Global Drug Facility have been effective in expanding access to high-quality drugs at reduced prices through pooled financing and commodity purchases. The Malaria Medicines Supply Service is proposing to use globally pooled procurement to increase purchaser leverage and reduce prices, while at the same time creating demand for artemisinin combination treatment (ACT) and expanding markets.
- *Making aid for health pro-poor.* The resources of global health initiatives are more focused on low-income countries than are donor commitments overall, and a high proportion of their resources are dedicated to communicable diseases, which disproportionately affect the poorest people in

low-income countries. Support from the initiatives is directly pro-poor, and they have been very effective at leveraging additional funds from foundations. Finally, they promote cost-effective interventions.

Against these achievements, however, there is a growing realization that the "verticalization" of health sector support through diverse, specialized global initiatives is having adverse effects. All the new global programs have put substantial effort into establishing lean and technically proficient administrations, careful accounting of funding and results, and innovative approaches to program delivery—including, for example, channeling funds directly to NGO providers. But their cumulative impact is to undermine the capacity of ministries of health for coherent planning, financing, personnel deployment, and administration.

A recent study of 14 low-income countries found that the multiplicity of global programs, on top of existing multilateral and bilateral channels, is exacerbating transaction costs and distorting sector priorities.[49] There have been numerous instances of different teams of technical experts with identical terms of reference visiting a single country, and different donors promoting conflicting approaches and priorities. Citing recent proposals in Guyana and Tanzania for HIV/AIDS treatment programs that equal half of existing health budgets, the report argues that such programs—driven by global financing availability rather than national poverty reduction strategy priorities—may draw disproportionately on health sector staffing and other resources.[50] Of equal concern are reports of agency turf fights and other coordination difficulties at the country level. An IMF mission recently concluded that bureaucracy and infighting linked to different specialized programs were the main reason one African country was unable to disburse more than 20 percent of available aid for health in 2004 (box 3.5).[51]

If ODA for health in support of the MDGs is to produce the desired results, a new framework is needed. Given the predominantly recurrent and local nature of financing needs, there is a strong case for providing the bulk of funding as general or sectoral budget support. Equally important is that all donor support be organized around a country-led health strategy that encompasses HIV/AIDS, malaria, and all other disease priorities in a balanced and coherent way. The sector strategy should be fully aligned with the country's poverty reduction strategy and consistent with its medium-term expenditure framework. No donor assistance should be "off plan" or off budget, and the first priority for donors should be to fill financing gaps in implementing the poverty reduction strategy.

But for donors to accept flexible transfer of their funding through national budgets, there must be a quid pro quo: Country public expenditure management and sector monitoring must meet performance standards that assure citizens of donor countries their money is resulting in efficient service delivery—and that those services, over time, are producing MDG results.

EDUCATION

Such a "compact" between countries and donors figures prominently in the Education for All Fast Track Initiative (FTI). Consistent with the Monterrey consensus, the initiative aims to ensure developing countries committed to universalizing primary completion the technical and financial support they need, in exchange for increased accountability for results. In contrast to health, there is a single global partnership to support MDG progress in education, which all education donors have formally agreed to. Also in contrast to the global health programs, the core objectives of the FTI are to support countries' development of a coherent education strategy and promote coordinated—and more efficient—donor support. To make technical assistance more efficient, donors have agreed to a pooled Education Program Development Fund at the global level to help countries develop credible education strategies and costed programs—and reduce the welter of uncoordinated, overlapping studies and capacity building initiatives. At the country level, all

BOX 3.5 IMF programs and MDG progress

The International Monetary Fund (IMF) has a clearly stated policy of ensuring appropriate flexibility in fiscal targets, including by seeking and accommodating higher aid flows in countries supported by its Poverty Reduction and Growth Facility (PRGF). How is this policy being implemented? What impact is it having on government spending and MDG progress in low-income countries? Why do critics continue to assert that IMF programs constrain countries' ability to scale up health and education service delivery? Consider the facts in three African countries.

Zambia. Some 16 percent of Zambia's adult population is HIV positive, and the government has set a target of reaching 100,000 Zambians with antiretroviral treatment by the end of 2005. In its fight against HIV/AIDS, Zambia is receiving support from the World Bank's Multi-country AIDS Program (MAP), the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). Resources from the MAP and Global Fund are mainly channeled through the National AIDS Council, while the PEPFAR operates largely outside the government budget. Efforts are now under way to compile a comprehensive database that tracks these inflows to improve coordination.

Funding to combat HIV/AIDS is rising sharply, and there now appears to be a problem of absorptive capacity. This is not a result of any direct or indirect limit on spending or hiring under the IMF-supported program. No limit has been placed on external funding of HIV/AIDS programs or hiring of health workers in the program. The budget for 2005 makes special efforts to ensure the employment and retention of available health workers. However, external sources of funding to HIV/AIDS typically do not cover personnel.

Uganda. Uganda has achieved considerable success in reducing HIV prevalence rates through aggressive public sector efforts at prevention and, now, treatment. Between 1998 and 2005 the health budget increased from 1.8 to 2.6 percent of GDP. Additional annual health resources of up to 2.0 percent of GDP are available from the Global Fund and PEPFAR. Nearly 40,000 Ugandans are currently on antiretroviral therapy. The authorities hope that by the end of 2005, 60,000 people will benefit from this therapy (out of 120,000 who need it).

The IMF's PRGF arrangement with Uganda includes a "ring fence" to protect health care and other poverty-related spending from within-year budget cuts, and promotes a progressive shift in resources to social programs—for example, by seeking to limit growth of nonpriority spending such as on public administration. But adequate budget resources are not the only issue. Improvements are needed in the management of Global Fund and other health resources to accelerate the use of approved funding (currently less than 20 percent of funding has been used). Capacity also needs to be enhanced in the health sector, notably through training additional nurses and doctors.

Kenya. Kenya's HIV infection rate is estimated at 14 percent of the adult population. The fiscal framework underpinning the PRGF-supported program reflects Kenya's poverty reduction strategy priorities, including the fight against HIV/AIDS—including actions to increase the number of AIDS patients on antiretroviral therapy.

The Global Fund, MAP, and PEPFAR are expected to disburse $32 million a year over 2005–6 to support the government's AIDS program—about 0.2 percent of GDP. The government estimates that AIDS treatment targets will require hiring 4,000 more nurses in addition to the estimated 2,000 additional nurses needed for the overall health system. The Global Fund has agreed to provide financing for 725 nurses on two-year contracts, under prevailing pay scales. While the current IMF program places limits on the size of the core civil service establishment, teaching, health, and security services are excluded. It has been agreed that these services may hire additional personnel to fill the 3,000 positions lost by the core civil service through natural attrition.

Source: IMF Africa Region staff.

education donors participate in ministry of education–led coordination groups, with a rotating donor "lead" agency. While such groups had arisen in some countries previously, they were not a systematic practice.

Country-level donor groups have three key responsibilities: review and collectively endorse the sector plan, align their financing with the country's priorities, and monitor progress in improving education spending efficiency, through a set of agreed performance indicators. Indicators include key outcomes, such as the primary completion rate and the gender ratio in education, and key intermediate indicators, such as the repetition rate, the pupil-teacher ratio, the share of education in public spending, and the share of education spending on books, materials, and other crucial quality-enhancing inputs.

Making each dollar of education spending go further is a joint priority under the initiative's "compact." Donors have also agreed that their progress in increasing aid efficiency should be monitored annually and reported transparently. At the March 2005 High Level Forum on Harmonization and Alignment in Paris, donors committed to a specific set of harmonization indicators (see chapter 5). Progress on these indicators will be monitored by the OECD's Development Assistance Committee (DAC). The FTI, which involves both country-level coordination groups and regular global meetings to monitor progress, offers a ready-made channel for disseminating the indicators and working with education donors on these agreed areas of harmonization and alignment. The initiative's secretariat, for example, is helping to turn principles into good practice by developing sample memorandums of understanding and common guidelines for assessing the quality of education sector plans.

The FTI was launched in June 2002. What has it accomplished? There is general consensus on two conclusions:

- The initiative is having a positive impact on donor coordination at both the country and global levels. Honduras's minister of education called this the initiative's greatest benefit, and countries such as Nicaragua, Vietnam, and Yemen have credited the initiative with bringing the donor communities in their countries together—and creating discipline around a country-led, coherent process of education planning and priority setting linked to their poverty reduction strategies. At the global level the FTI has promoted ongoing dialogue and information sharing among donors, through semi-annual meetings and working groups focused on priority issues such as tracking of aid flows and harmonization.
- A continuing challenge for the initiative is countering skepticism about its ability to mobilize substantially increased funding for the education MDG. Although a first set of endorsed countries has received significant additional support, the number of countries is small and the commitments are fairly short term. Moreover, many more countries are poised to enter the initiative. As part of the global stocktaking of MDG progress in 2005, donors need to develop options for a more stable funding framework for the FTI.

In contrast to the global programs in health, the FTI started with little upfront funding. Instead, donors pledged to commit additional resources to specific countries once their sector plans had been endorsed and financing needs established. The rationale was that channeling incremental funding through existing bilateral and multilateral mechanisms would speed disbursements and avoid the increased bureaucracy and transaction costs of setting up new global funds. With initial support from the Netherlands (subsequently joined by Belgium, Italy, Norway, and the United Kingdom), however, a $235 million trust fund was established in 2003, called the Catalytic Fund. Given its size, the fund was not designed to be the primary financing channel for primary education support. Rather, it provides transitional (two- to three-year) financing to endorsed countries with only a small number of active donors ("donor orphans") until larger and more sustained

volumes of aid can be attracted from new bilateral or multilateral channels.

While this approach has kept administrative and transactions costs lower than in the health sector, it is difficult to argue that it has worked well from the perspective of mobilizing the incremental aid volumes needed to achieve the education MDG. The financing gaps for the first seven countries endorsed by the initiative have been closed, but it took almost two years to do so, and transitional support from the Catalytic Fund has played a large role. The additional commitments for these seven countries represent a 30–40 percent increase in their ODA for primary education, but the new commitments extend only to the end of 2006. The gap-filling has not been timely, and the assurance of sustained and predictable financing is largely absent.

Another five countries, endorsed in 2002–3, still have financing gaps totaling $260 million (over three years). And in 2005 as many as 25 additional countries could meet the FTI endorsement requirements (having a poverty reduction strategy and an agreed education plan), raising global financing needs for the program to an estimated $1.7 billion in 2005 and more than $3 billion a year from 2006.[52] From a developing country standpoint, however, there has been no credible indication from the initiative's donors that these amounts are being programmed.

The FTI's country-driven model, its alignment with Poverty Reduction Strategy and Medium Term Expenditure Framework planning and budgeting, its focus on monitoring results and spending efficiency, and its active promotion of donor harmonization are all important achievements. Its donors now need to develop a fundraising model that ensures a substantially increased volume of sustained, predictable funding for countries with credible education plans and good implementation performance.

Making the Money Work

Achieving the MDGs will depend above all on developing countries' ability to achieve stronger public sector performance in delivering services. The challenge is essentially political. The evidence that aid works best where policies and governance are good is influencing aid flows, and this trend will intensify. While some donors suggest that a viable strategy in weak states is to bypass the public sector altogether, no OECD country has ever achieved universal health or basic education coverage with mainly private systems—in fact, most are heavily public. Both for-profit and nonprofit private actors will likely play more important roles in the development of these sectors in low-income countries, especially low-income countries under stress (box 3.6), and especially in water and sanitation. But even where services are privately provided, effective state capacity is required to perform the core functions of mobilizing revenues, planning, costing and prioritizing sector investments, setting standards and policies, contracting with providers, and monitoring outcomes.

The World Bank's *World Development Report 2004* documents the many ways in which the public sector in developing countries fails in service delivery, particularly for poor people. Even where spending on education and health absorbs a high share of GDP, key outcomes can be weak (figure 3.17). Studies consistently confirm the weak relationship between social spending and outcomes—especially in health—and the two main causes. First, spending may not be allocated to the types of services that most directly affect outcomes. Health spending on hospitals, for example, does not have as much impact on child mortality rates and malaria incidence as does spending focused on immunization programs and malaria control.

The second issue is that even where resources are allocated to the basic education and primary health care services most closely linked to MDG outcomes, the chain of people and transactions through which resources flow down to frontline providers is long, geographically dispersed, dependent on the discretionary behavior of many individuals, and open to leakage at many points. The core services that frontline teachers and doctors provide are complex and individualized, making them difficult

BOX 3.6 Scaling up service delivery in low-income countries under stress (LICUS)

Low-income countries under stress are defined by their weak policies and institutions. Many have recently emerged from or been affected by conflict. Achieving effective service delivery in these circumstances is a challenge. Nevertheless, successful approaches are emerging, including some that feature the use of local institutions or that work with nonstate actors in ways designed for eventual transfer to state delivery.

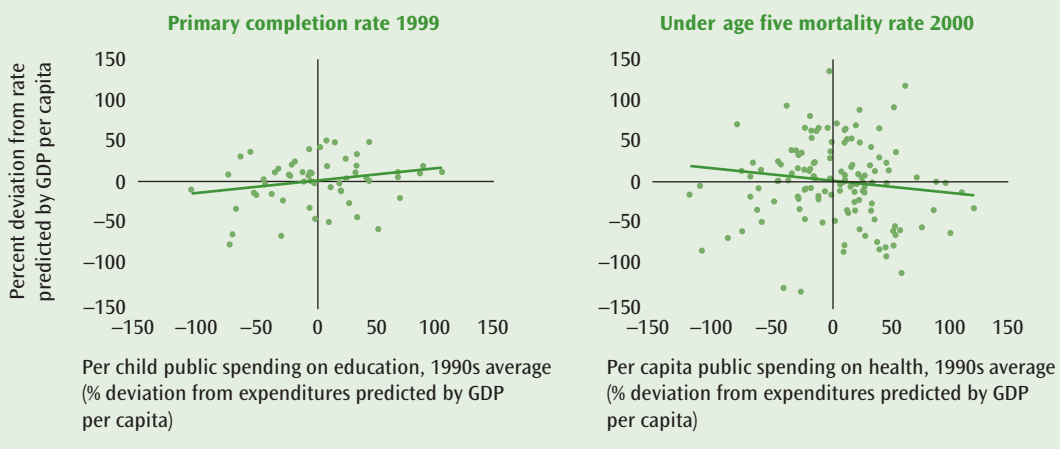
In countries where national institutions are weak, it may seem counterintuitive to look to the subnational levels of government to provide services. But in a number of low-income countries under stress, it is at the local level that formal and informal institutions often demonstrate the most capacity to manage and allocate resources. Community-driven development and social fund approaches have been widely used and proven well suited to these country contexts.

The Northern Uganda Social Fund, for instance, supports construction and rehabilitation of social and economic infrastructure that is identified, managed, and implemented by local communities in conflict-affected areas. In Afghanistan community forums helped ensure vital services and income generation opportunities in local areas during a period of state collapse. Supported by small grants to cover initial costs, the forums relied mostly on community mobilization and cost recovery to organize and finance services. They gradually developed relationships with local governments and donors to become key development actors at the local level. Their highly flexible approach allowed them to respond to community initiatives and local conditions, and later to become the basis for a social fund after the fall of the Taliban. Until recently their model of representative governance was unique in Afghanistan and contributed to the local reduction of ethnic tensions at a time when ethnicity became heavily politicized and a driver of conflict. The project laid the basis for the new National Solidarity Program, which operates at scale and has been instrumental in bringing both participatory processes and a positive state presence to many remote areas.

Particularly in postconflict countries, experience shows that it is important to give early attention to building the capacity of government actors to take responsibility for service delivery, as well as to restoring basic services quickly. In Timor-Leste health indicators improved significantly in the four years following the country's crisis, through a strategy that balanced these two goals. The program worked simultaneously on short-term needs such as reconstruction of health facilities, through government contracts with nongovernmental organizations (NGOs), and medium- to long-term goals such as developing a national health policy, pharmaceutical logistics systems, human resources for health, and gradual handover of NGO contracts to government.

Source: World Bank LICUS unit.

FIGURE 3.17 Higher spending on education and health does not always mean better outcomes



Source: World Development Report 2004.
Note: Regression line shown: Coefficient = .157, T-statistic = 1.70.

Note: Regression line shown: Coefficient = –.148, T-statistic = 1.45.

to monitor and manage. Difficult working conditions, uncompetitive salaries, and higher status relative to illiterate and unempowered families can undercut providers' accountability to clients and foster absenteeism and low quality. Inefficiency in the use of available resources, arising from all these sources, can be large.

The case for additional aid, especially in the form of flexible budget support, will depend on countries' ability to show that funds are well managed and producing MDG results. And as the *World Development Report 2004* emphasizes, reforms to improve service delivery must address not only its proximate causes—no drugs in clinics, teacher absenteeism, no water connections in poor urban areas—but also the underlying power and accountability relationships linking citizens, politicians, and service providers that are the cause of persistent inequity and inefficiency in the use of public resources. Progress in many settings will require actions on all three dimensions of the "accountability triangle" linking citizens, politicians, and service providers. It will require broad reforms to improve governance and increase the responsiveness of elected officials to citizens, strategic actions to improve the management of resources and performance along the service delivery chain, and strengthening of "client power," or citizens' ability to demand better basic services directly from frontline providers.

Improving Governance

The broad structures at the foundation of good government—the rule of law, control of corruption, sound economic management, representative governance, and independent media—are crucial for macroeconomic growth and foreign direct investment. They also have direct repercussions on the equity and efficiency of public services.

Jump-starting progress toward the MDGs can require decisive actions to prioritize universal coverage of basic services over the interests of politically influential stakeholders. It has involved such politically difficult actions as shifting to contract teachers to make the costs of expanding schooling more sustainable, at the price of opposition from teacher unions; eliminating fees for basic health services for the poor while retaining them for upper-income groups; shifting to low-cost construction of schools and clinics by communities rather than more expensive national or international contractors; and resisting pressures from teachers and parents for smaller classes until universal coverage is achieved.

All these actions to lower the unit costs of basic services or recover costs from those who can afford them promote faster achievement of universal coverage. Countries that have made the fastest MDG progress have given priority to coverage for all, adopted cheaper but "good enough" service delivery models initially, and focused on improving quality over time. These political choices are unlikely in contexts where the voices of the groups that would benefit from universal access are weak and the influence of institutional stakeholders, such as medical or teacher unions, is strong. A recent study of Georgia concluded that slow progress on the health MDGs and underfunding of MDG-related health services were much more a "failure of citizens to exercise their voice power and the ability of politicians to remain largely unresponsive to the poorly expressed demands than of resource limitations per se."[53]

But progress is being made. In most developing regions, two decades ago democracy was the exception; now it is the rule. Political representation, transparency, corruption, and the quality of public administration are being openly evaluated with a number of international indexes, and most are steadily improving. Since 1999 the average ratings for Sub-Saharan African countries on the World Bank's policy and institutional assessment index (CPIA) have been stable or increasing in all five areas (quality of budgetary and financial management, efficiency of revenue mobilization, quality of public administration, property rights, rule-based governance). The New Partnership for Africa's Development (NEPAD) has developed a peer review

mechanism that uses transparent national assessments by teams from neighboring countries to highlight governance weaknesses in African countries and encourage improvements (see chapter 2 for more on NEPAD and the African Peer Review Mechanism).

One of the most critical areas for progress is public expenditure management. Achieving the health and education MDGs will require greatly increased volumes of flexible aid channeled through national budgets. But in many of the low-income countries in greatest need of external recurrent cost support, budget systems are too weak to give donors confidence that resources can be tracked and well used. Systems for budget formulation, execution, and reporting must be able to meet threshold standards of integrity and efficiency.

Under the Heavily Indebted Poor Countries initiative the IMF and World Bank have worked with countries on benchmarks for measuring capacity to manage priority public spending. Although a first assessment of 24 countries in 2002 found no country with a fully adequate system and most in need of substantial upgrading, many countries showed progress when they were reassessed in 2004 (see chapter 2 for more details). Mali and Tanzania advanced to the category of "little upgrading needed," and Ghana and Senegal showed substantial progress. For the group as a whole the average number of benchmarks met increased from 6.0 to 6.5 out of a possible 15. Much more is needed, obviously, but trends are in the right direction. But countries' performance against these indicators can be expected to play a major role in their access to expanded aid in the form of budget support.

Managing the Service Delivery Chain

Broad improvements in political responsiveness to citizens and in public expenditure management should increase the resources available for MDG-related services. But it is the service delivery chain—institutional performance and policies in the education, health, water, and sanitation sectors—that transforms financing into coverage and coverage into outcomes. Substantial country evidence shows that both links can be problematic. But country experience also points to four important strategies for strengthening provider accountability and system efficiency.

MEASURE RESULTS, PERFORMANCE, AND IMPACT

Fundamental for progress is measurement of performance and results. At present, countries are far from real-time tracking of MDG progress for virtually all the goals and indicators. To focus health and education systems on key results, countries need better and more timely administrative data. Capacity building in this area should be a priority, but it must be carried out in new ways that avoid the wastefulness of incompatible management information systems financed by different donors and technical assistance that fails to build true local capacity. Countries also need household surveys at regular intervals—such surveys are essential for tracking MDG outcomes by income quintile, gender, ethnicity, or region.

The World Bank and the United Nations Educational, Scientific, and Cultural Organization's Institute of Statistics should put coordinated emphasis on building countries' capacity for consistent annual reporting of primary school completion and build up the Primary Completion Database they have jointly launched. The targets for the second MDG, on primary school completion, should also be expanded to include some measurement of student learning. Universal primary completion is a meaningful goal only if it signals that children have learned, and in an economically integrated world this threshold level of skills and knowledge should be a globally relevant one. Donors should support work by a consortium of international testing agencies on a culturally neutral global "core curriculum" that can be embedded in the various regional learning assessments in use today. Countries not participating in regional assessments should be encouraged to do so. And strengthening national assessment systems should be a

priority area of support. Equally important is making results known to parents and communities. Albania, Romania, and Turkey, among other countries, have recently made important strides in broad public diffusion of student learning results.

Most MDG outcomes improve relatively slowly, so intermediate indicators of progress are also important—above all, measures of system efficiency. The FTI "indicative framework" for monitoring education sector performance is transparent and permits direct comparisons of countries' progress; a similar framework is being developed by a donor consortium in health (Health Metrics Network). These new approaches will work to the advantage of countries committed to better performance.

Finally, rigorous evaluation of the impact of development programs builds the knowledge base for better policies. Considerable resources are devoted to evaluation studies today, but the failure to establish clear baseline data or appropriate controls often compromises the quality and policy value of the results. Several recent examples, including the Progresa/Oportunidades conditional cash transfer program in Mexico and school health interventions in Kenya, attest to the role that well-designed evaluations can play in persuading policymakers to expand or sustain programs, even across changes of government.

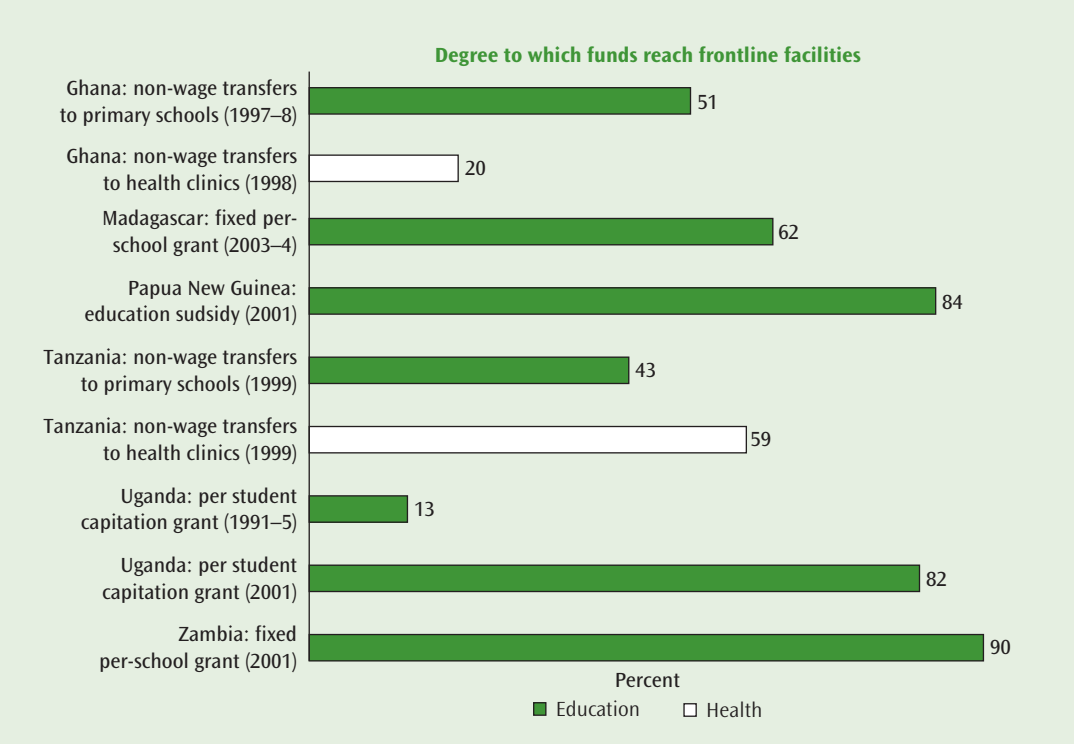
One of the most crucial questions for policymakers is how a program or policy's design will play out in different country circumstances. This kind of knowledge, which can be derived only from comparable evaluations across countries, is a global public good—and the costs of generating it need to be broadly shared by the international development community. The World Bank is especially well-positioned to identify programs with similar objectives and design features being implemented in different parts of the world, and to support systematic and rigorous evaluations of their impact. Through the Bankwide Development Impact Evaluation (DIME) initiative and efforts by the Bank's Human Development Network to organize impact evaluations of key types of education, health, youth employment, and early child development programs, there has been a sharp increase in attention to this area over the past year. It should be strengthened further, with expanded support from donors to build capacity in low-income countries for data collection and analysis and to broadly diffuse evaluation results. Developing country policymakers and their donor partners should also provide a "demand side" stimulus to impact evaluation, by systematically asking for the evidence base when considering new programs or policy proposals.

USE TRANSPARENT ALLOCATION RULES AND THE POWER OF INFORMATION

A core issue in education and health service delivery is getting funds to the frontlines, where services are delivered. Setting simple, clear norms for the allocation of funding has been a boon to more efficient and equitable service provision in both developed and developing countries. In education, "funding follows the student" reforms have had dramatic effects in countries ranging from Brazil to Australia. In Brazil a 1997 reform that set a minimum floor on education spending in all regions sharply increased resources for the poorest (Northeast) region, and nationally caused primary enrollments of children from the lowest income quintile to rise from 55 percent to 85 percent—in the space of six years.

Norms for the allocation of personnel or other inputs (such as medicines or books) can also be established and clearly communicated to each facility. In addition, fees for health services and drugs should be posted transparently, to ensure that patients are charged fairly and collected funds are not diverted. In Georgia prominent posting of the fee schedule in the children's hospital in Tbilisi has curbed excessive payments and significantly increased hospital revenues.[54] In water and sanitation, Burundi and other countries have significantly increased investment efficiency by setting clear guidelines, disbursement procedures, and performance indicators for civil

FIGURE 3.18 Leakage of funds can be high but is not inevitable



Source: Kushnarova 2005.

works contractors, with oversight provided by nonprofit contract management agencies. As a result water and sanitation project execution has improved dramatically in Burundi, with invoice payment time averaging 5 days—compared with 90 days elsewhere in the central government.

The positive impact of clear funding rules on leakage is shown by public expenditure tracking studies, which document enormous variations in the degree to which funds intended for frontline facilities actually reach them (figure 3.18). Leakage estimates are not comparable across countries and sometimes simply reflect a failure to record transfers properly, not a failure of resources to arrive. But the studies show that even in the same country, results can vary substantially under programs with different designs. Leakage is not an inevitable feature of low-income settings.

Clear allocation rules have the greatest impact if they are widely known. Uganda raised the share of per student capitation grants that made it to schools from 13 percent in 1991–5 to 82 percent in 2001 by publishing monthly data on the transfers in newspapers, broadcasting it on the radio, and having primary schools post notices of their entitlements and the amounts actually received. For the first time, parents had the information they needed to understand and monitor the grant program.

Subsequent research in Uganda has documented that throughput to the school level is most efficient in areas where newspaper penetration is highest—pointing to the power of information.[55] And a new study shows that, controlling for other factors, schools with higher transfers show more improvement in student learning.[56] Uganda's story points to three key messages for MDG progress:

- Clear, equitable norms for managing key inputs—be it personnel allocations or funding for books or drugs—are important.
- Broad use of the media and transparent reporting at the facility level can unleash "client power" and pressures for improvement.
- It is important to go the extra step to analyze not just progress in reducing leakage, but also its impact on outcomes, such as student learning or community health indicators.

Few countries have done all these things, but the growing number of countries using Public Expenditure Tracking Surveys (PETS) and Service Delivery Surveys to measure frontline funding and service quality is encouraging.

FOCUS ON PROVIDER QUALITY, DEPLOYMENT, AND INCENTIVES

Skilled providers are the most expensive element of health and education systems; recruiting, deploying, equipping, and supervising them carefully are key to maximizing the productivity of spending. Yet very few countries recruit teachers on the basis of tests measuring their subject mastery and what they can do in the classroom. Far more common are the practices of Colombia, where teachers and headmasters are routinely hired based on party affiliation regardless of their experience, training, or knowledge,[57] or Cameroon, where headmaster posts are sold.[58]

Deployment is also poorly managed in many settings. In Ethiopia each health worker in the Afar region handles 1,200 outpatient visits a year, in Addis Ababa 680, and in Gambella just 82.[59] The implication? If health care workers were posted more efficiently across the system, achieving Afar's degree of productivity everywhere, the Ethiopian health care system could dramatically increase service delivery with the current number of workers.

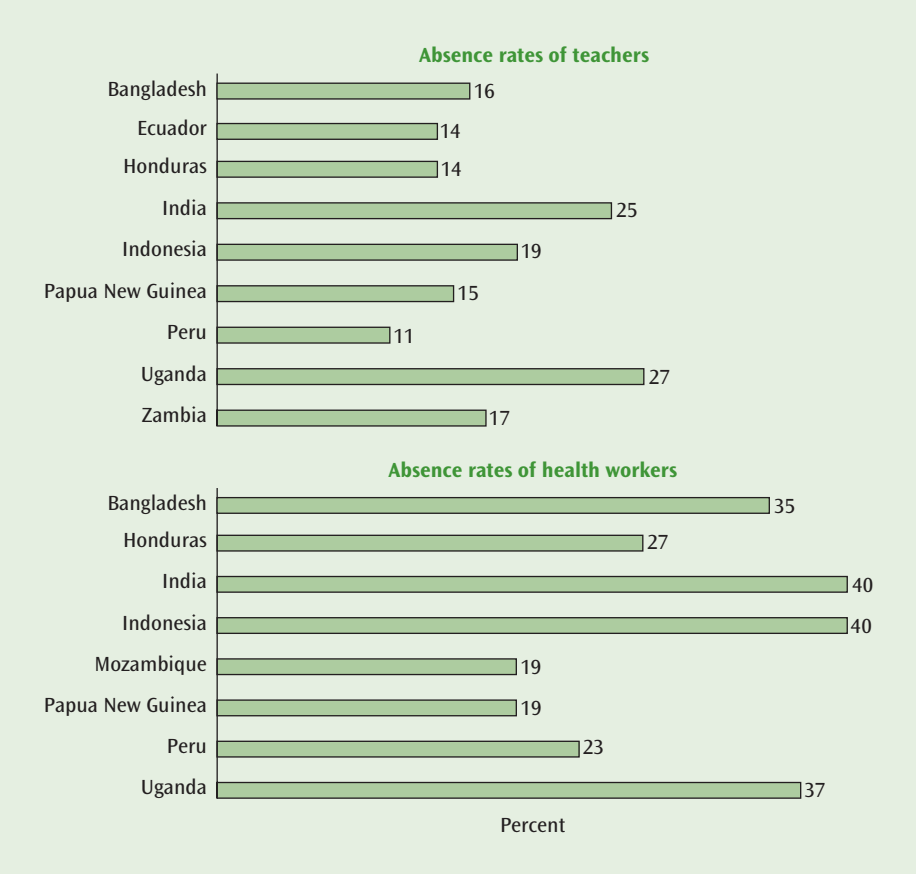
Similarly, studies in Sub-Saharan Africa find some countries doing a far better job of allocating teachers equitably across schools. Whereas in Benin 39 percent of teacher postings deviate from the official norm of 40 students per teacher, in São Tomé and Principe only 3 percent do. Deviations from official norms almost always reflect an oversupply of teachers in more appealing urban areas and low service provision in rural zones.[60] Countries seeking better MDG outcomes can start by examining factors like these.

Even when providers are deployed relatively efficiently, poor incentives, weak management, widespread illness, and other factors can cause high rates of provider absence. Surveys of service delivery that make unannounced visits to a sample of facilities show consistently high absence rates among teachers and health workers (figure 3.19). The problem is especially acute among doctors, who have a ready private market for their services. In Bangladesh absentee rates for physicians average 74 percent at small rural posts.[61] Provider absence seriously disrupts service delivery and undermines MDG outcomes. In Nigeria a 2003 project to track effective hours of instruction found that almost half the annual school hours in Kano, Nasarawa, and Lagos were lost because of teacher and pupil absences.[62]

Studies that have examined this issue in detail have found that it is not simply a question of salary incentives. In Bangladesh the highest-paid teachers were most likely to be absent.[63] And in India, as well as Bangladesh, a large share of teacher absences were excused absences for training and other administrative processes. Many providers posted to remote rural areas, for example, must travel long distances to pick up their pay—and must do so on business days. Countries concerned about MDG outcomes need to address these managerial issues.

Average salaries for skilled providers may need adjustment in many contexts, to counter providers' incentives to migrate internationally in health or to extract informal payments. But there is abundant evidence that effective incentives are not just a question of average salaries, or even salary dispersion, although—if tied to performance evaluation systems perceived as fair—this can help. Nonsalary inducements (such as housing, research and training oppor-

FIGURE 3.19 Absence rates can be very high, especially in health



Source: Kushnarova 2005.
Note: Based on studies/surveys conducted between 2000 and 2004.

tunities, and public recognition) are important, as are accountability pressures through, for example, effective supervision. In Karnataka, India, the Learning Guaranty Program is an innovative attempt to strengthen incentives for public education providers to focus on outcomes that really matter—how well they serve all children in the community, and how much children learn (box 3.7).

MAKE GOOD USE OF THE PRIVATE SECTOR

Comparisons of service delivery norms and outputs in public and private facilities often reveal large differences in efficiency. Although the Christian Health Association of Ghana employs only 17 percent of health sector staff, it handles 41 percent of hospital patient visits (outpatient and inpatient) and 27 percent of health clinic visits.[64] Evaluations of Jesuit-run Fe y Alegria schools in nine Latin American countries have found that the schools systematically outperform public schools, with lower repetition and dropout rates and higher graduation rates—despite the fact that resources per student are the same or lower in Fe y Alegria schools and the schools cater to disadvantaged students.[65]

The higher efficiency of private providers can have major benefits for poor people's access to services and for MDG progress. In Barranquilla, Colombia, after water and sanitation services were contracted out in 1993, water supply coverage increased from 68 to

BOX 3.7 Rewarding schools for MDG outcomes

The Learning Guaranty Program, launched in 2002 by the government of Karnataka, India, in collaboration with the Azim Premji Foundation, aims to strengthen incentives for schools to enroll all children and ensure that they learn. All of the approximately 10,000 public primary schools in the poor, northeastern districts of the state are eligible to participate in the program, which is essentially a competition. Using a novel approach, the program rewards schools on the basis of learning outcomes for all children in their catchment area, whether or not they are enrolled. If 60 percent of children can demonstrate on assessment tests that they have acquired 90 percent of prescribed competencies in mathematics and language, the school receives 5,000 rupees. If 70 percent of children do well, the reward is 10,000 rupees. And with 80 percent, the reward is 20,000 rupees. Over a three-year period a school can win a maximum of 60,000 rupees.

In the program's first year, about 10 percent of schools competed, but the number has since risen dramatically. The program provides direct financial incentives for government schools to deliver better education services to their communities. It is expected that the program will enable parents and communities to put pressure on their children's schools to become a certified Learning Guaranty School. It is also expected that such schools will develop more creative ways of encouraging children to enroll and stay in school. The Learning Guaranty Program is an interesting attempt to more closely align schools' incentives and MDG outcomes.

Source: Azim Premji Foundation 2002, cited in World Bank 2004b.

99 percent by 2002, and sanitation coverage increased from 54 to 96 percent. In addition, unaccounted-for water fell, taps began functioning 24 hours a day, and response times for consumer complaints improved dramatically. Poor consumers benefited most from the increased efficiency: more than 80 percent of new connections were in low-income neighborhoods.

After Argentina privatized local water companies in about 30 percent of its municipalities in the early 1990s, child mortality fell by 5–7 percent in those areas. The largest gains occurred in the poorest municipalities, where child mortality fell by 24 percent. Researchers estimate that privatization of water services has prevented 375 child deaths a year.[66] Data from Bolivia and Chile confirm this pattern: private companies' capacity to generate income from efficiently operated services and promote faster system expansion led to pro-poor expansion of water supply, with 25–30 percent of network expansion targeted to the poorest fifth of the income distribution.

Countries can capitalize on what private providers do best by allowing high-quality for-profit providers to serve the top segments of the income distribution and making strategic use of contracting with for-profit and NGO providers to serve other income groups. NGO providers are often associated with local innovation and community involvement in service delivery, which increase quality, targeting, and cost-effectiveness. El Salvador, Guatemala, Honduras, and Panama are increasingly contracting with NGOs to provide health services to remote (often indigenous) populations on the basis of fixed annual capitation payments. In most cases the NGOs use networks of itinerant teams, complemented by community-based paramedics. In Guatemala, where the experience is longest, about 90 NGOs serve more than 3 million people—30 percent of the national population. Impact evaluations have shown more cost-effective health outcomes under this approach than under traditional public sector delivery.[67]

That Bangladesh has made faster progress on MDG outcomes than other South Asian countries, despite its lower per capita income, is attributed by many observers to its wide-

spread use of partnerships between the government and innovative NGOs. In health the country's largest NGO, BRAC, developed a system for teaching mothers how to use oral rehydration therapy for children with diarrhea, under which more than half of outreach workers' compensation is paid as bonuses. Bonuses are based on sample surveys of mothers, and the greater the number of women in a village who can explain how to make and use the rehydration solution, the higher the payment. Within the first two years of the program, two-thirds of mothers sampled could use the therapy—a much higher success rate than outreach and communication efforts usually achieve. Researchers also observed a wide range of practical and effective teaching techniques developed by the outreach workers in response to what worked best for clients.[68]

But private service delivery does not automatically lead to better accountability. Also in Bangladesh, researchers have found higher rates of teacher absence in privately run, government-subsidized secondary schools than in schools run by the government directly. Even though continued public funding is supposed to be tied to school performance, government supervisors rarely visit schools, and there are few institutional mechanisms to ensure accountability.[69] The issue is not public or private; it is the degree to which the institutional framework creates incentives for good performance and the capacity to hold providers accountable.

Strengthening "Client Power"

In many settings slow progress toward the MDGs mainly reflects the failure of services to reach or meet the needs of poor people. Poor regions are the last to receive access to social services. And even when they do, deep social inequalities and rampant illiteracy can produce such imbalances in client-provider relationships that abusive or alcoholic teachers, nurses hitting mothers during childbirth, and doctors refusing to treat patients of a lower caste constitute "service delivery" for hundreds of millions of poor people. Even more widespread is the failure to listen to low-income clients' needs in order to make services work better.

Countries are experimenting with ways to strengthen client power in frontline relationships, and the results are encouraging. While increasing client choice among providers is a core strategy, it is most feasible in relatively developed settings—urban areas in middle-income countries—where provider density is relatively high. Approaches that increase voice appear to hold more promise for expanding MDG-related services in low-income countries, at least for the near future.

INVOLVE COMMUNITIES IN TARGETING, MONITORING, AND MANAGEMENT

Experiences with community-run schools, health clinics, and rural water systems in a diverse group of countries suggest that direct client involvement in the design and management of services can yield positive results. The water supply and sanitation sector has been at the fore of more efficient targeting of subsidies by involving communities—and especially women—in designating which households qualify as poor. In Cambodia water operators compete for contracts to connect designated households and are paid per connection; this "output-based aid" has resulted in connection costs for poor households that are about one-quarter below the average for public bids. After being connected, households pay the full costs of operating and maintaining the systems—which ensures their sustainability.

In education, evaluations in numerous Latin American countries and Indian states have found that parental and community involvement in schools is correlated with lower teacher absenteeism, higher student test scores, and in some cases lower dropout and repetition rates. Three Central American countries—El Salvador, Honduras, and Nicaragua—have more than a decade of experience with relatively strong devolution of autonomy to primary schools and substantive

engagement of parents in school management, including the ability to hire and fire principals and teachers. These reforms have resulted in less teacher absenteeism, longer teacher work hours, more homework assignments, and closer parent-teacher relationships. Such changes are promising, especially in contexts where education quality is low, teacher absenteeism is high, and schools are often not functioning.[70]

But evaluations in these countries have also shown that the degree of effective control varies across schools. Although El Salvador's community-managed schools program (EDUCO) has shown that illiterate parents can manage school budgets and key personnel decisions, researchers in Nicaragua found many schools where parents' de jure involvement in school councils was not matched by de facto voice. Communities often need capacity building and support in taking on these new functions. Finally, evaluations of student learning outcomes provide a reminder that improving teacher attendance and work hours are only first steps toward improving education quality. The impact of school-based management on learning outcomes is mixed, with Honduras showing the most improvement, El Salvador some improvement, and Nicaragua declines. For better outcomes, teachers also need to be knowledgeable in the subjects they are teaching and to use effective teaching methods. School-based management has not affected these areas.

LET CITIZENS EVALUATE PROVIDERS

A second tool for promoting voice is citizen report cards or other surveys to gain client feedback on the performance of public services. Report cards enable clients to signal needed reforms and can increase accountability pressures through media coverage and civil society advocacy. Report cards on public services were first tried in Bangalore, India, in 1993. The feedback—revealing poor quality, petty corruption, lack of access for slum dwellers, and the large hidden private coping costs of deceptively cheap public services—were widely publicized by an active press. The report cards empowered citizens to directly evaluate the civil service and pushed managers of public agencies to act.[71] By 1999 a report card rated some Bangalore services substantially higher. Citizen report cards have since been used in Colombia (where a program called Como Vamos is supported by major media groups that disseminate results), Peru (where they are built into the national household survey), the Philippines, Vietnam, and most recently Albania. They are also being developed in Argentina, Bolivia, Ecuador, Honduras, Mexico, and Ukraine. A similar tool is community scorecards, which focus on service performance at the facility or community level. Rwanda is developing community scorecards for health and education facilities. In Parana, Brazil, a school report card allows parents to rate their children's schools, teachers, and overall performance.

These approaches have the potential to alter accountability relationships between clients and providers, but in many settings it will take time for client power to develop. In Parana state officials observed that parents were often unsure about what to assess and found it difficult—particularly in face-to-face meetings—to criticize the school establishment. Still, as a signal from the public sector that citizens' views are considered important for improving the quality of service delivery and the accountability of providers, these approaches are an important step in the right direction. Their effectiveness will be enhanced if communities have regular access to basic information on school, clinic, district, and national performance on key MDG and other indicators.

STRENGTHEN DEMAND WITH CONDITIONAL CASH TRANSFERS

Conditional cash transfers provide cash grants directly to poor families, conditional on their children's regular school attendance and health clinic visits for immunizations, nutrition support, and growth monitoring. They have been adopted in a number of Latin American countries over the past 10 years and are spreading to other regions.

Such transfers have a number of selling points. First, rigorous impact evaluations have shown that they work—they are effective both in raising the immediate incomes of poor families and developing their longer-term human capital.[72] Second, conditional cash transfers have political advantages: They allow central governments to have a direct relationship with a target population and to provide a visible and popular form of assistance. The programs can operate with small technical teams, focused on designing and maintaining the targeting system and ensuring timely payments by post or local bank accounts to large numbers of families. Compared with the alternative of channeling incremental public funds through inefficient public agencies or decentralized levels of government, the political attraction for national politicians is clear.

But from the standpoint of MDG progress, conditional cash transfers' third asset is by far the most important. They can protect the health and brain development of children during the period when these investments are most crucial—the first three years of life. Losses in brain development from undernutrition, micronutrient deficiencies, illness, and lack of cognitive stimulation in this period are irreversible. Investments supported by conditional cash transfers in early child development are the most highly leveraged investments countries can make toward MDG progress.[73] They affect nutrition, infant and child mortality, and subsequent performance in primary school.

The evidence from Latin America is robust that conditional cash transfer programs increase clients' use of education, health, and nutrition services. Some researchers also point to empowerment effects on poor clients, who gain a sense of legitimacy in approaching public services because the transfers rest on an explicit expectation that they should use such services. A major question in adapting such transfers to other countries is how efficient they are in settings where service quality is poor. Conditional transfers cannot fix the supply side of service delivery. But where supply is adequate, they are an effective tool for stimulating demand among target vulnerable groups.

Quick Wins Are Not Enough

Many developing countries must promote MDG progress as rapidly and cost-effectively as they can over the coming years. There is understandable interest in interventions that produce results quickly—such as insecticide-treated bednets and the elimination of school fees. But there are some important cautions. First, even "quick" interventions require system capacity to deliver, and it is crucial that capacity be built in efficient and sustainable ways. In pursuit of faster progress, donors have too often succumbed to the temptation to "parachute in" capacity or develop parallel delivery channels that may not be sustainable over the long term. Even the quickest of wins needs to be part of a long-term process of capacity building.

Deworming pills, for example, work very quickly, but it has taken four years—after funding became available—to get deworming mainstreamed across primary schools in Guinea and Senegal. Water and sanitation access for clinics and schools can bring vital gains in their effectiveness, but while the physical access may be relatively easy to achieve, the capacity to operate and maintain the hardware is not: Witness the large number of nonfunctioning school toilets in developing countries. "Quick wins" are not necessarily quick or easy to implement at scale. And even harder and longer-term is building the capacity and systems to sustain them.

Second, some powerful and cost-effective interventions may have longer-term impacts, such as conditional cash transfers that stimulate early child nutrition and health care, or the building of a new medical school. The key for any country is to prioritize investments that will have the highest overall returns in its context. This needs to emerge from a careful diagnosis of the national context, through the poverty reduction strategy process, supported by sound sector planning, costing, and identification of binding constraints.

Still, the "quick wins" recommended by the Millennium Project offer a useful menu for countries to consider. Most of the recommended

interventions are backed by robust microlevel research. Some will be relevant in a number of different country contexts.

But they will not be enough. Quick wins are no substitute for context-specific identification of priorities. Nor do they constitute the full range of high-return investments in a given context, some of which are inherently longer term. Finally, even where they are adopted as relevant strategies, they do not solve the biggest challenge: building capacity for effective, large-scale implementation.

Priorities for Global Action

For many countries, especially in Sub-Saharan Africa, the MDGs will not be met without unprecedented expansion of health and education service delivery. The private sector will play an important role, particularly in health, but most incremental funding will be channeled through the public sector—and in many countries deep changes in public sector functioning are needed for funding to produce results. The challenge is great, but pragmatic strategies are being shown to work.

As discussed elsewhere in this report, the priorities for public action in education, health, water supply, and sanitation must be determined in the context of a country-owned poverty reduction strategy that is at the center of national planning and budgeting processes. If the MDGs are to be reached, poverty reduction strategies must include well-costed, coherent sector strategies aimed at these goals—which has not always been the case. Individual interventions—such as "quick wins"—need to be evaluated in this country-specific framework. To cope with uncertainties in aid levels, countries can draw on sector plans to prepare two or three alternative "stretch" scenarios that can be implemented if additional funding is available.

Special actions are needed in the three critical areas analyzed in this chapter: scaling up skilled providers in health and education, ensuring the sustained financing required to expand these recurrent cost intensive services, and making sure that money produces effective service delivery and results.

Scaling Up Skilled Providers

Expanding education and health services on the scale needed to achieve the MDGs will require major increases in teachers, doctors, nurses, and community health workers, especially in Sub-Saharan Africa. Human resource shortages are likely to be a binding constraint on system expansion, especially in health, unless countries adapt policies and increase provider productivity. Strategies that are proving effective include:

- Pragmatic adjustments to recruitment standards, to increase production of alternative teachers and community health workers.
- Careful deployment and management of providers, to avoid underutilization.
- Effective use of incentives to make public sector positions attractive, especially in rural areas.
- Selective salary adjustments for the highest-skilled workers (such as doctors) in the public sector, to diminish migration.
- Cost-effective investments in medical, nursing, and teacher training capacity, to complement the shorter-term strategies above.

Donors have an important role to play in addressing the crisis in human resources for health in many developing countries. Health sector wage adjustments in OECD countries could attract more of their own nationals into service. Developed countries that benefit from African-trained medical personnel could help finance expanded training facilities in those countries and assist them in recouping medical students' loans. A donor working group has begun to develop proposals in this area, which should get priority attention.

Mobilizing Sustained Recurrent Cost Financing

To achieve the MDGs, many developing countries will need to allocate more of their own fiscal resources to education and health. For education, 20 percent of the recurrent budget is the benchmark under the Fast Track Initia-

tive, while Sub-Saharan African countries, for example, currently average 15 percent. For health, African governments have set a target of 15 percent of the recurrent budget, well above their current average of 8 percent.

But every MDG analysis has concluded that countries' own efforts will not be enough, and a large increase in external financing is required. Equally or more important for the human development MDGs are deep changes in the nature of donor support. A significant share of bilateral assistance falls outside national planning and budgeting processes. Transaction costs severely strain recipient countries' limited administrative capacity. And there is a near-complete disconnect between the type of expenditure needed to scale up service delivery in education and health—recurrent, local, largely personnel costs—and what bilateral donors are actually providing—short-term, in-kind, and largely technical assistance financing.

Most MDG cost estimates have focused on countries' core financing requirements, but most aid today—bilateral and multilateral—cannot be flexibly used for these. Support for capacity building is important, but it must be costed over and above the core requirements. Technical assistance should also be carried out in new ways, to eliminate the all too common pattern of uncoordinated and overlapping studies, training, and technical advisers being provided to the same country by different donors.

The MDGs will not be achieved unless all development partners rethink the way they do business. Specific priority actions include:

- *Aligning aid with PRS priorities.* All aid should support priorities identified in the poverty reduction strategy and endorsed sector plans—nothing should be "off plan." In countries meeting public expenditure management standards, all aid should flow through national budget and procurement systems.
- *Limiting the number of recipient countries.* A twofold strategy of narrowing the number of countries of bilateral interest and channeling future increases in ODA largely through multilateral channels and coordinated global efforts would lower transaction costs and contribute to MDG progress.
- *Harmonizing assistance.* At the recent Paris Forum, donors committed to specific harmonization indicators, with progress to be monitored by the OECD's Development Assistance Committee. But the EFA FTI, which involves both country-level coordination groups and regular global meetings to monitor progress, and the High Level Forum in Health and country level coordination groups offer ready-made channels for disseminating the indicators and working within the respective sectors toward better harmonization and alignment.
- *Creating a stable funding framework for the Fast Track Initiative.* To strengthen the Fast Track Initiative, its partners should make a monitorable, public commitment to sustained funding for primary education. The target should be a significant annual increase from each partner's 2005 base, which the initiative's secretariat should monitor. This kind of predictable funding framework is essential to signal to actual and potential recipient countries that the initiative has sustained financial backing. Each partner's annual funding commitment should help fill agreed financing gaps for endorsed countries where they have a bilateral presence or interest; any residual should be allocated to the FTI Catalytic Fund. Donors should also show that expanded support for primary education is not coming at the expense of funding for other levels of education, especially secondary education.
- *Supporting increased funding for health.* Additional external resources are needed to prevent and treat childhood diseases and maternal conditions, sustain HIV/AIDS treatment, and make progress against malaria and tuberculosis. Increased donor funding must be longer-term and more predictable, aligned with country priorities, and increasingly made available through budget support.

- *Aligning global health initiatives with national policies and priorities.* The global health community urgently needs to examine all options for ensuring that global programs organized around specific health priorities do not undermine the coherence of countries' health strategies, the balanced allocation of resources, and the strengthening of health systems. Scenarios should preserve the mandates these programs currently have for resource mobilization, awareness raising, results monitoring, and financing of global public goods with respect to individual disease priorities. But these functions must be much better coordinated at the global level, to achieve greater convergence of policies and strategies, and especially at the country level, with harmonized procurement, disbursement, and reporting.

  Each country should have a country-led health sector working group involving all development partners—including the national HIV/AIDS coordinator and a representative from the education sector—to coordinate school health and prevention programs. This group should agree on the overall sector strategy and medium-term investment plan for health, and on key outcome and intermediate indicators to be monitored annually. The most efficient strategy is to create a single pooled fund to provide budget support linked to implementation of the agreed sector program. Within such a framework, global programs could pursue the same objectives—but without the high transaction costs of separate programming missions and procurement and reporting requirements.

  The High Level Forum for the Health MDGs, established in 2003, offers a platform for this collaborative "rethink" of the current global architecture in health and for the development of common principles and standards of good practice for the engagement of global health partnerships at the country level.
- *Aiding countries to absorb more aid effectively.* The IMF should continue to take a public, proactive stance in helping governments increase absorption of external grants linked to the MDGs. IMF policy is that program ceilings should be flexible in accommodating such additional spending when grant financing is available. The IMF should help country authorities work with development partners and civil society groups to clarify how fiscal and wage bill ceilings are derived, and provide reassurance that program ceilings are in fact flexibly accommodating spending supported by grants. Staff reports should also explicitly discuss how IMF-supported programs have addressed key macroeconomic issues that affect MDG progress.

Translating Resources into Service Delivery and Results

Achievement of the MDGs is in the hands of developing countries. Increased aid—especially in the form of flexible budget support—is unlikely to materialize unless countries demonstrate both sound public expenditure management and MDG results. The first requires systems for budget formulation, allocation, and reporting that meet threshold standards of integrity and efficiency. In many of the countries in greatest need of external recurrent cost support, these systems are too weak to give donors confidence that resources can be tracked and used well. Donors are giving high priority to capacity building in this area, but the deepest constraints to country progress are political.

The second requires the capacity for real-time data on MDG progress. Countries need to be able to track the primary completion rate and use regular household surveys and sentinel monitoring to generate data on child and maternal mortality and major communicable diseases. Data must be disaggregated by gender, region, and income to ensure that MDG progress is reaching vulnerable groups. Because outcome indicators improve relatively slowly, intermediate indicators of progress are also important—above all, measures of system

efficiency, such as those for education developed by the Fast Track Initiative. A similar framework is being developed by a donor consortium in health (Health Metrics Network). These new approaches will work to the advantage of countries demonstrating improved performance.

Progress will also require a better evidence base for policy, built on rigorous impact evaluation of key programs. Programs should be rolled out in ways that permit the use of control groups. Countries should develop local capacity for carrying out quality evaluations and using results. But knowledge on how interventions play out under different country circumstances is a global public good—and the costs of generating it need to be broadly shared by the international development community. The World Bank has an important role to play, through the Development Impact Evaluation initiative, in organizing more—and more systematic—evaluation of innovative programs across countries, supporting metastudies in key areas, ensuring broad diffusion and use of results, and supporting country-level capacity building.

Ultimately, strengthening service delivery requires action to improve core accountability relationships: the responsiveness of governments to citizen demands through the political process, the responsiveness of service providers to clients, and the effectiveness of government agencies in turning resources into results. These weaknesses are the deepest threat to MDG progress. There are no panaceas. But countries are making progress in improving governance. Sector management can be helped by clear funding norms, competency-based recruitment, results focus, attention to cost-effective standards, and strategies to make effective use of the private sector. Above all, governments can strengthen the voice of clients at the point of service delivery—through the power of information, direct involvement in school and health facility monitoring and management, and the use of conditional cash transfers.

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