

## Recent Trends and Innovations in Development Assistance for Health

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After nearly a decade during which levels of external development assistance for health (DAH) stagnated, an encouraging rise has occurred in the volume of such assistance. Donors and developing countries are testing and implementing innovative approaches to the use of DAH, while simultaneously seeking ways to raise the effectiveness of existing streams of aid and more traditional financing mechanisms. In short, DAH has entered a dynamic phase that holds considerable promise.

Nevertheless, it continues to suffer from a broad range of disappointments: misuse and inefficiency in the deployment of funds, gaps in essential areas that require financing support, and weaknesses in institutional and management arrangements. Substantial room for improvement exists.

This chapter documents those recent trends, analyzes the effects and assesses the performance of DAH, and points to areas that require priority attention. In the first part, we present statistics on DAH, updating the *World Development Report 1993* (World Bank 1993) and the report of the Commission on Macroeconomics and Health (CMH 2001). In the second part, we assess the performance of DAH. In the third part, we present recent innovations to underscore the current dynamic nature of such assistance. The chapter concludes with some suggestions on future directions.

### TRENDS AND GAPS IN DEVELOPMENT ASSISTANCE FOR HEALTH

Despite a decline in overall official development assistance in the 1990s, DAH rose in real terms and as a proportion of official development assistance (table 13.1). New funding sources became available in 2000–2, including the Global Fund to

Fight AIDS, Tuberculosis, and Malaria and special U.S. financing for HIV/AIDS, plus rapid growth in grant awards from the Bill & Melinda Gates Foundation and in World Bank International Development Association (IDA) grants. Commitments from all external sources, including foundations, rose from an annual average of US\$6.7 billion in 1997–99 to about US\$9.3 billion in 2002.

Total DAH is the sum of external financing for health from several different sources: bilateral agencies as reported through the creditor reporting system of the Organisation for Economic Co-operation and Development (OECD); multilateral agencies, including the United Nations (UN) system—especially the World Health Organization (WHO), the United Nations Children’s Fund, the United Nations Population Fund, and the global and regional development banks; the European Union; philanthropic organizations; and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. Because no central repository of data on all the sources of DAH is currently available and comprehensive information is not published on any regular basis, painstaking and time-consuming efforts are required to assemble accurate, comparable data about all these sources.

After a long period of decline in official development assistance (grants from bilateral government channels and UN agencies plus net flows from development banks) during the 1990s, the OECD reported a real increase of 7 percent from 2001 to 2002 and a further increase of 4 percent from 2002 to 2003. Those increases took official development assistance to an all-time high, in both nominal and real terms, of US\$68.5 billion. As a percentage of gross national income, this represents an increase from the all-time low of 0.22 percent recorded during most years from 1997 to 2001 to about 0.25 percent in

**Table 13.1** Development Assistance for Health, Selected Years (US\$ millions)

Source	Annual average, 1997–99	2002
Bilateral agencies	2,560	2,875
Multilateral agencies	3,402	4,649
European Commission	304	244
Global Fund to Fight AIDS, Tuberculosis, and Malaria	0	962
Bill & Melinda Gates Foundation	458	600
Total	6,724	9,330

Sources: Michaud 2003; OECD 2004a.

2003, still well below the target of 0.7 percent set by the OECD's member states in 1970. Only five countries—Denmark, Luxembourg, the Netherlands, Norway, and Sweden—currently achieve this target, and six others have now set prospective dates for its achievement—namely, Belgium (2010), Finland (2010), France (2012), Ireland (2007), Spain (2012), and the United Kingdom (2013).

Bilateral assistance for health rose from an annual average of US\$2.2 billion (3.8 percent of the total) during 1997–99 to US\$2.9 billion (6.8 percent) in 2002. Among the bilateral arrangements, the United States accounted for about 40 percent of the total, even though as a percentage of gross domestic product (GDP), its allocation to international development was among the lowest of all the high-income countries.

Within the UN system, DAH rose from an average of US\$1.6 billion per year during 1997–99 to US\$2 billion in 2002. Commitments from the development banks remained stationary at about US\$1.4 billion. However, changes in accounting by the World Bank to include financing for health activities contained in projects managed by other sectors (such as urban, water and sanitation, transportation, and social development), suggest that its new commitments for health actually rose from about US\$1 billion in 2001 to US\$1.3 billion in 2002 and US\$1.7 billion in 2003.

In the future, consensus will need to be reached on whether allocations by the multilateral development banks to projects in other sectors or to projects that are classified as multisectoral—especially broad budget support to governments, which may be specifically tied to domestic spending and policy reforms in health—should be counted as DAH. Another issue in DAH accounting involves distinguishing between allocations for health from the multilateral banks that take different forms—namely, outright grants (a recent innovation for the World Bank and the regional banks); subsidized loans for the poorest countries, which at the World Bank are IDA credits; and loans for the middle-income developing countries that reflect the actual costs of borrowing by the development banks. For example, of the US\$1.7 billion in World Bank commitments for

health in 2003, about US\$1 billion took the form of IDA credits, and most of the rest was in the form of loans that reflected the costs of borrowing. Because the face value of the financial commitment can be considered to be reduced by repayments in the case of subsidized and market rate loans, some argue that the net financial value of such loans, rather than their face value, should be used in calculating DAH. This calculation further complicates the task of monitoring DAH.

Despite these various cautions and qualifications, it is clear that DAH has grown in recent years. This upward trend has been driven by several factors, including (a) donors' increasing attention to the challenges presented by the Millennium Development Goals (MDGs), which are heavily centered on maternal and child health and control of communicable diseases; (b) strong global mobilization to confront the AIDS pandemic in developing countries since 1998–99, especially in Africa; and (c) donors' expanding interest in research and development (R&D) in relation to new health technologies to address the major diseases prevalent in poor countries. In contrast, external funding for health system development, human resources, and noncommunicable diseases has increased more slowly.

In terms of the areas that have benefited from the growing volume of DAH, three stand out: HIV/AIDS, immunization, and new health product development. According to Michaud (2003), in 2002 about US\$900 million in DAH was for HIV/AIDS, followed by US\$210 million for tuberculosis (TB), and US\$160 million for malaria control. The Joint United Nations Programme on HIV/AIDS (UNAIDS) also reports a substantial rise in external financing for AIDS prevention, treatment, and social mitigation activities over the past four years (UNAIDS 2004). Most of the increase in assistance for immunization has taken place through the Global Alliance for Vaccines and Immunization (GAVI), which has amassed commitments of about US\$1.3 billion to finance the expansion of existing childhood immunization programs and the accelerated introduction of hepatitis B and *Haemophilus influenzae* type B vaccines. Assistance for health technologies directed at diseases that are prevalent in the developing world has been channeled through new public-private partnerships. Examples include the International AIDS Vaccine Initiative (IAVI), the Medicines for Malaria Venture, and the International Partnership for Microbicides. Estimates indicate that the 10 largest public-private partnerships have raised more than US\$1 billion over the past five years (IPPPH 2004).

In terms of the sources of the expanded volume of DAH, a small number of institutions account for much of the recent increase. Among the traditional donors, these institutions include the World Bank and the governments of Canada and the United Kingdom. At the same time, as a share of GDP, contributions from Ireland, the Netherlands, Norway, and Sweden remain high. Among nontraditional sources, the Bill &

Melinda Gates Foundation stands out as a major new player as of the late 1990s. With a focus on the development of new drugs, vaccines, and diagnostics for the developing world, the Gates Foundation's commitments for health started in 1998 and rose rapidly to some US\$600 million in 2002, with annual commitments expected to approach US\$1 billion in 2004 and beyond.

Development assistance for health is channeled to a large number of low- and middle-income developing countries, but the largest recipient region is Africa. In 2002, about 35 percent of all such assistance went to Africa, followed by Latin America and the Caribbean with around 14 percent, East Asia and South Asia with 11 percent each, and the Middle East with 7 percent. The remaining 22 percent was for global programs (Michaud 2003).

This growth in funding for the control of communicable diseases and new health technologies to address them is important, given the high burden of illness and premature death these diseases cause. Nevertheless, the focus on AIDS, TB, and malaria should be matched by similar increases in investments in broader health system improvements. Relatively little DAH is being channeled to address the serious problems of shortages in health workforces in poor countries and their low productivity or to deal with weaknesses in health management information systems, in supply chain logistics for drugs and commodities, and so on. Even though focused spending on AIDS, TB, and malaria will clearly touch on these weaknesses, it will not on its own go to the core of the problem or lead to sustainable solutions. For example, GAVI allocates resources to strengthen immunization infrastructure such as cold chains and to train health workers to deliver vaccinations more effectively. The Global Fund to Fight AIDS, Tuberculosis, and Malaria provides funds to prepare health workers to deliver and monitor compliance with antiretroviral treatments. Useful as those activities are, they will not address the underlying weaknesses in human resources for health in poor countries, such as low levels of pay, unattractive conditions of service, and uncertain prospects for career advancement.

The recent rise in DAH is encouraging, but it is still far short of the volume of external financing for health that is needed, according to recent estimates and political pronouncements. On a global level, estimates of what donors need to provide to help countries reach the MDGs for health have typically ranged from US\$15 billion to US\$35 billion per year. The Commission on Macroeconomics and Health suggested a figure of about US\$30 billion a year. While preparing for the Monterrey Summit on Finance for Development, the World Bank calculated a funding gap of US\$15 billion to US\$25 billion a year (Devarajan, Miller, and Swanson 2002). For the United Nations General Assembly special session on AIDS in June 2001, UNAIDS suggested that spending on HIV/AIDS alone in the developing countries needed to rise to about US\$9 billion annually by 2005, with about two-thirds of this amount to

come from external sources (UNAIDS 2001). At the 2004 International AIDS Conference in Bangkok, UNAIDS raised its estimate of resources needed to more than US\$15 billion a year by 2010 (UNAIDS 2004).

These global calculations have been followed by more detailed costing exercises at the country level, which hold the promise of yielding more accurate and meaningful figures than the global estimates. Donors working with government specialists in developing countries have tested a variety of methods. The UN Millennium Project has used a bottom-up approach, which is based on expanded coverage of key interventions and fixed unit costs, assuming no shared costs or benefits among different interventions, omitting the possibility of private financing, and adding a rough amount for system improvements (UN Millennium Project 2004). The World Bank has followed two other approaches. One, in India, is based on observed elasticities of change in children's health and nutrition outcomes in relation to public expenditures on health, primary education, water, and so on (World Bank 2003a). Another, in Ethiopia, Mali, and other countries, is based on detailed modeling of the costs of removing bottlenecks in health service delivery to enhance the coverage, utilization, and quality of key health interventions proven to have a positive effect on maternal and child health outcomes (Soucat and others 2003; World Bank and Ministry of Health, Ethiopia 2005).

A comparison of the Millennium Project's and the World Bank's results for East Africa is interesting. The Millennium Project calculates that nearly US\$30 per capita are needed in additional spending for health, whereas the World Bank calculates that about US\$4 per capita are needed for Ethiopia to reduce child and maternal death rates by 30 to 40 percent by 2015. The large difference between the two sets of results suggests that more work needs to be done to move toward consensus on the best methodology for countries to use.

Part of the difference is due to technical factors. The Millennium Project approach covers all the health MDGs, whereas the bottlenecks method has focused on the MDGs pertaining to child and maternal health only. The Millennium Project also calculates costs to achieve the MDGs in their entirety, whereas the bottlenecks method addresses incremental improvements. For example, in relation to the child mortality goal, the bottlenecks analysis for Ethiopia considers a substantial decline to be from 176 to 107 deaths per 1,000 live births, but the MDG is 59 deaths per 1,000 births. In addition, the Millennium Project multiplies additional units of service by a standard cost per unit, whereas the bottlenecks method estimates the cost of system improvements and then divides this amount by the additional services rendered to derive incremental unit costs.

The two approaches also have important differences in political philosophy. The Millennium Project approach sets high targets for DAH and health spending, which are based on full achievement of the MDGs, regardless of the starting points and

gaps and without addressing the feasibility of reaching the targets. The World Bank's approach is less ambitious but may be seen as more realistic and as pointing the way to implementation based on gradual improvements—improvements that countries can pursue as additional financial resources and capacity to manage them effectively are combined on the ground.

## MAKING DEVELOPMENT ASSISTANCE FOR HEALTH MORE EFFECTIVE: LESSONS LEARNED

More assistance is part of the answer to helping developing countries achieve more rapidly the improved health outcomes they seek and that are enshrined in the MDGs. To this end, we need to know how effective DAH has been and what can be done to make it more effective.

Despite valid criticisms of DAH, some health programs—inspired and supported by donors—have worked at scale and contributed to more than four decades of steady improvements in health, as measured by under-five mortality and overall life expectancy. The record of public health successes in developing countries is becoming increasingly clear, as noted in a recent review of four decades of experience (Levine and What Works Working Group 2004). The success stories cover a broad spectrum of circumstances. They are found in all regions and cover both communicable and noncommunicable diseases. They have been driven by new technologies, including vaccines, drugs, and diagnostics; community- and clinic-based care; and knowledge for behavior change.

Significant gains have occurred even in the poorest countries and in those with weak institutional environments. Consider, for example, the high levels of TB case detection in the Democratic Republic of Congo and in Myanmar (Stop TB Partnership 2003), the successes in polio eradication in African countries experiencing civil wars, and the growing availability of antiretroviral therapy in Haiti.

Some of this progress can be attributed to the general effects of economic growth and improvements in education, water, and sanitation. However, specific, compelling examples of the success of DAH-backed initiatives are available. For example, programs to immunize against measles, to control river blindness and guinea worm, and to fortify salt with iodine have had sustained and widespread effects (Levine and What Works Working Group 2004). These programs have been successful at scale, have generated sustainable health improvements at the population level, and have succeeded in a broad range of institutional environments.

Recent analyses and reviews of donor-supported successes in international health have noted a set of factors that tend to contribute to positive outcomes:

- strong internal (governments) and external (donors) political leadership

- collaboration across governments, donors, and nongovernmental organizations (NGOs) in program design and implementation
- consistent, predictable funding support, even after success has been achieved
- simple and flexible technologies that can be adapted to local conditions and do not require complex skills to operate and maintain
- programmatic approaches that recognize and address the need to help build health system infrastructure, especially in human resources
- household or community participation in the design, execution, and monitoring of program activities.

### Policy Environment

Development assistance for health supports a vast array of activities and services, some focused on specific diseases (polio, TB, HIV/AIDS), some on strengthening health systems (disease surveillance, nurse and midwife training), and some on particular services (reproductive and child health services). But has DAH actually changed health outcomes? Recent work from the World Bank, the Commission on Macroeconomics and Health, and others suggests that it has (Rajkumar and Swaroop 2002). However, DAH does not work as effectively in countries where the policy environment is poor, even though some carefully targeted disease control activities can confer limited benefits. With good policies and institutions (strong property rights, reduced corruption, an efficient bureaucracy), an extra 1 percent of GDP in aid is estimated to reduce infant mortality by 0.9 percent. By contrast, where policies are average, the decline is estimated at only 0.4 percent, and where policies are poor, aid is estimated to have no significant effect on infant mortality (World Bank 2004b).

The issue is not black and white: there are gradations of good policy, and as policies improve, the productivity of aid increases. For example, Bangladesh has made large strides in reducing under-five mortality in recent years, relying on NGOs to deliver many services. If Bangladesh were able to raise the quality of its governance from below average to above average, even at its same public spending levels, it would realize more rapid gains. An additional dollar of government health spending would reduce under-five mortality by 14 percent, compared with 9 percent without such improvements (World Bank 2003c).

Tradeoffs may be necessary between targeting assistance toward the neediest countries and achieving the greatest effect from DAH, but even in needy countries with weak policies, some kinds of carefully targeted assistance for health (for example, immunizations delivered by reputable NGOs) can have a positive effect. In addition, in countries with weak policies, a focus by donors on policy dialogue and technical

assistance to improve the environment for DAH can set the stage for a larger infusion of financial support down the road.

### **Conditionality**

Conditionality is making the availability of funding dependent on a government completing an agreed task, such as enacting a new health law or spending a certain share of its budget on health activities. It can work, but only if the government is committed to making such a change. Tying aid to policy changes is a common practice, but recent studies have cast doubt on the ability of such conditionality to bring about reform (World Bank 1998, 2003a). If governments are not committed to reform, conditionality will not make them reform. Donors themselves often undermine the rigor and credibility of conditions because they usually face strong internal pressures to continue disbursement of the funds anyway, even when governments do not adhere to the agreed-on conditions. On the other hand, if governments are committed to reform, conditions can help by enabling governments to commit publicly to certain reforms and persuade private investors of their seriousness. For example, the government of Uganda's commitment to decentralizing the management of basic health services and to making local authorities accountable to communities was reinforced by conditions in the Uganda poverty reduction support credit, which several donors financed. Similarly, the Chinese government's commitment to reaching the poor with TB control services was reinforced by stipulations in donor-funded TB projects that they target the country's poorest provinces and reach out to deprived households (World Bank 2003c).

Donors cannot force policies on governments, but they can help with policy design. Donors can alert governments to the reasons for reform and help nurture commitment, but at the end of the day, it is governments that have to sustain any reforms (box 13.1). Undertaking analytical work, providing training and technical assistance, disseminating ideas about policy reform and development, and stimulating debate in civil society can all be valuable activities for donors to support while a government's commitment to reform is growing.

Vietnam in the late 1980s and early 1990s is a good example. At a landmark meeting in 1986, the ruling Communist Party decided to break with the past and introduce sweeping economic reforms. In the health sector, the reforms included introducing user fees at public facilities, legalizing private medicine, deregulating the pharmaceutical industry, and opening the pharmaceuticals and medical equipment subsectors to international trade. Initially, Vietnam saw no increase in aid, but such agencies as the United Nations Development Programme and the World Bank helped facilitate the reform process by organizing international workshops for the Vietnamese to exchange ideas on policy with their neighbors.

This effort set the stage for a large inflow of donor financing, starting around 1995 and continuing to the present.

### **Fungibility of Development Assistance for Health**

Much aid is earmarked, both across sectors and within them. One part of a development agency gives a grant to the ministry of health for a health sector reform, while another does the same for a primary education project. An agency makes a loan to the ministry of health for a TB project, while another makes a loan for a malaria control project. The donors' intent is that these activities remain tightly sealed: the funds for health sector reform are to be kept separate from the funds for the primary education project; the TB project funds are to be kept separate from the malaria control project funds. The idea is to ensure that the government makes a certain spending choice. It is based on the assumption that the choice would not be made if the government had been handed a blank check for the same amount.

The implied view of such aid is that what you see is what you get; that is, a government receives US\$1 million for a water project and the net effect is US\$1 million worth of extra spending on the water sector. This view has recently been challenged, with the alternative view being that aid is at least partly fungible (Burnside and Dollar 2000; World Bank 1998). Hence, as a result of the inflow of development assistance for a specific health activity, the government changes the way in which it spends the rest of its resources, both in the health sector and in terms of allocations between health and other sectors. As a result, for each dollar earmarked for a specific health project, spending on health rises by less than a dollar but by more than would have been the case had the government received an extra dollar in its overall budget. Similarly, spending for the specified purpose in the health sector rises by less than a dollar, but by more than would have been the case had the government allocated an extra dollar of its own resources to health generally.

Assessing whether aid is indeed fungible is not straightforward. The difficulty is knowing how the government would have responded had its own resources increased by the amount of the aid or had it received a blank check for the same amount. Recent research suggests that, despite considerable variation across countries, on average only 29 cents of each additional dollar of aid goes into government development programs, with the rest leaking out into nondevelopment programs such as military spending (World Bank 2004b).

One important implication of those findings is that donors should spend less time and effort trying to channel their external funding to specific programs for priority diseases and populations. Instead, a more useful exercise would be to engage in a dialogue with the government on basic changes in the overall patterns of public spending for health—that is, the total

### Box 13.1

#### Donors and Commitment: Nutrition in Bangladesh and Thailand

In most countries, nutrition has not become a visible issue on the national political agenda, because nutrition advocates have not succeeded in linking improved nutrition with political and economic goals or in creating popular demand to eliminate malnutrition. In Bangladesh in the early 1990s, the United Nations Children's Fund and the World Bank joined forces to present a case to the government showing how the country could not achieve its economic goals unless it reduced malnutrition. This effort persuaded the government's financial planners that funding a national nutrition program was a good investment, and the government approved a new nutrition project in 1995.

However, the issue is not just how to build initial commitment, often the main focus of organizations such as the World Bank. Commitment can be fragile, and the issue is how to broaden and maintain commitment and complement it with systematic investments in institutional capacity development. The first nutrition investment in Bangladesh was completed in 2001. Children's nutritional status and households' health-seeking behaviors improved substantially in project areas, and malnutrition rates declined. A follow-on nutrition investment was approved, but because of weak government commitment, it is struggling in the challenging policy environment in which the social sectors operate. The Ministry of Health has not assigned high priority to the program, and conflicts

between the government and the NGOs involved in community activities have complicated the situation. Contradictory messages from donors and frequent changes in leadership within the government have added to the challenge.

More recently, donors and advocates for nutrition within the government have proposed that nutrition activities that build on earlier successes be included in the Health, Nutrition, and Population Sector Program, which is scheduled to be finalized and approved in early 2005.

In contrast, in Thailand, building commitment for nutrition was achieved during the 1980s and nurtured with little external support. Government-sponsored efforts through studies, workshops, and media outreach generated commitment for nutrition by building broad consensus (in the government, NGOs, and the private sector) on the benefits of nutrition—not as a welfare issue, but as a human development issue. This initial commitment was sustained by ensuring that policy statements were closely linked to national investment plans, by building strong technical and managerial capacity for nutrition in the country (often by means of external aid), and by linking those actions with a strong buy-in and demand from communities. Malnutrition rates in Thailand declined from 51 percent in the early 1980s to 18 percent in 1990 and continue to fall.

*Source: Heaver 2002.*

allocation and the amounts for, say, providing child health and communicable disease control services and for improving community and primary-level health delivery systems. If the government followed through on those basic changes, then donors would transfer their financial assistance to the health sector as a whole.

The finding that aid is indeed fungible has encouraged some donors to search for broader development assistance mechanisms that recognize the importance of the entire expenditure program and explicitly avoid earmarking. Such mechanisms include the Multi-Country AIDS Program in Africa, which supports national HIV/AIDS strategies; sectorwide approaches in health; and poverty reduction support credits (PRSCs) that back a broad public spending agenda.

An opposing viewpoint is that although, in general, good policies matter and the fungibility of aid tends to undermine

donors' ability to earmark their funding effectively, many high-impact health services can be delivered to the population on a targeted basis even when national policies and institutions are weak—and this aid would not occur in the absence of DAH. This argument applies especially to services with simple technologies—for instance, basic childhood vaccinations that can be delivered on a single occasion through annual campaigns or disease treatment programs (such as short-course drug therapy for TB) that can be provided through tightly managed top-down efforts (Jamison 2004). The high coverage and treatment success using the directly observed short-course therapy approach for TB in the Democratic Republic of Congo in recent years, even during the civil war, can be cited as an example of how a well-protected enclave project with strong donor backing can be successful (Stop TB Partnership 2003).

Another argument against broad budget support of health sector funding or in favor of the more traditional earmarking of DAH is that it helps maintain governments' and donors' focus on implementing and monitoring specific health service interventions and on the necessary technical and managerial improvements to ensure the achievement of targets in those areas. On the basis of experience in countries such as Bangladesh, Ghana, Mozambique, and Zambia, donors are increasingly of the view that broad support to a national health sector program leads to superficial oversight of bureaucratic processes and a corresponding loss of technical focus and depth (Foster, Brown, and Conway 2000). Although a sector-wide approach is theoretically fully compatible with careful monitoring of key outputs and health outcomes and with in-depth technical improvements, in practice, achieving this mix of objectives may prove difficult.

In summary, the debate on earmarked versus broad DAH support for national health programs continues. More analysis is needed to produce clearer conclusions on the advantages and disadvantages of the two approaches.

### Transaction Costs of Aid

In a single low-income country, more than 20 donors—including bilaterals, multilaterals, global programs, foundations, and large NGOs—may be involved in the health sector. The demands placed on recipient countries can be huge, and donors are starting to acknowledge this burden. They are recognizing that their individual procedures for reporting, accounting, and managing funds—which often encompass different budget structures; different ways of measuring progress toward objectives; different regulations for the procurement of goods, services, and works; and different approaches toward and cycles for disbursing funds—place heavy and unreasonable demands on recipient countries. Demands are particularly heavy in poor countries that are forced to allocate limited human resources away from service delivery to manage donor funding.

The donor community is working to harmonize and simplify its procedures to reduce these transaction costs. In the health sector, experiments are taking place in several developing countries, including Bangladesh, the Kyrgyz Republic, Mozambique, and Zambia, to determine how best to lower the costs (OECD 2004b). Some of the principles of improved donor action include the following:

- ensuring that countries, not donors, drive the coordination
- fostering strategic coherence through a poverty reduction strategy and the health, nutrition, and population analyses that feed into it
- promoting financial coherence through a medium-term expenditure framework and an agreement that all donor

funding will respect the government's overall spending plans and limits

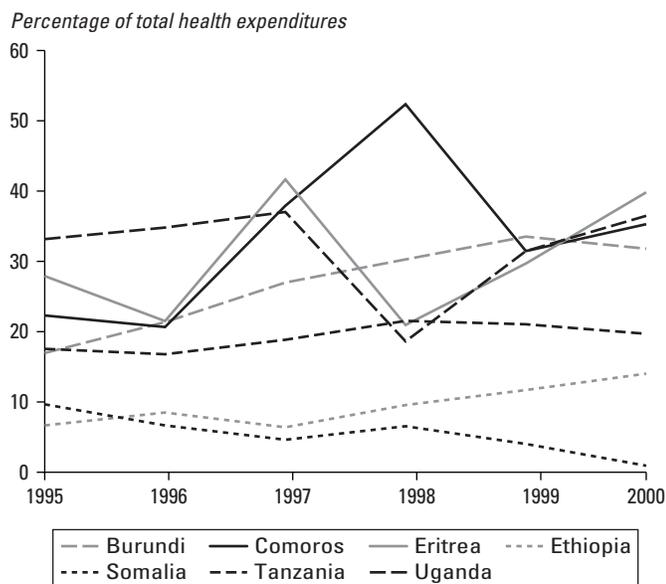
- pooling donor funds in a single account and untying aid so that the government can procure goods and services from the lowest-cost source and not just from the donor countries
- limiting the number of country coordination bodies that can bring together national and international actors involved in health.

At the same time, some of the experiments in country-level coordination of DAH reveal the difficulties of implementing the principles of better donor harmonization. In some instances, persuading donors to pool their funds and sever the links between funding and procurement has proven difficult. Some donors face pressure from their legislatures to maintain separate accounting for the use of their DAH allocations so they can claim credit for achieving progress and thus “plant flags” on individual health projects. In addition, monitoring and evaluation systems have frequently not been strong enough to yield timely and meaningful data on progress, a critical failure if disbursements are linked to performance rather than to spending on specific inputs. Multiple national coordination bodies for government, donors, and NGOs for different diseases (AIDS, TB) and services (immunization, polio eradication) also persist in many settings. In short, a number of political and technical changes are needed to ensure the successful implementation of a harmonized donor agenda at the country level in the poorest developing nations.

### Unpredictability of Development Assistance for Health

Some donors have taken steps to put in place instruments for DAH that extend the length of their financial commitments. The development of multiphase funding “slices” of 3 to 5 years embedded in a 10- or 15-year program of support is one way to lengthen commitments. Nevertheless, donor financing for health is not yet as reliable or sustained as is often claimed or hoped for, even under these new, long-term arrangements. In some developing countries, cuts in DAH have been sharp. Donors' budgets are subject to the usual business and political cycles and may go up or down during their annual budgetary processes. For such countries as the Comoros and Eritrea, where the year-to-year changes in external funding can amount to as much as a fifth of all public spending for health, the fluctuations are so great that they make planning and implementing coherent national health programs nearly impossible (figure 13.1).

Further work is needed to design mechanisms for DAH that provide greater assurance of sustained financial support. The challenges are to overcome the factors that result in interruptions to long-term DAH. Those factors include changes in



**Figure 13.1** External Financing as a Percentage of Total Health Expenditures, Selected Countries, 1995–2000

political leadership and aid agency management that lead to modifications of earlier agreements and end up reducing external funding levels or reallocating those funds to other activities.

One example of an innovative approach is the recently proposed establishment of an international finance facility. This facility would use financial commitments from governments of developed countries to tap funds in capital markets and would use those funds to frontload development assistance so as to accelerate progress toward the MDGs. The International Finance Facility for Immunization, which the United Kingdom formally announced at the World Economic Forum in January 2005 and is aiming to launch later in the year, will expand external financing for childhood vaccinations. The pilot project could be used to pledge funding against multiyear advance-purchase contracts for new vaccines (such as rotavirus vaccine) that may not reach the market for several years. Such an effort could help create a more assured market and reduce the risks for vaccine companies, thereby speeding up the introduction of these new health commodities to low-income countries (GAVI 2004b).

## RECENT INNOVATIONS TO IMPROVE THE EFFECTIVENESS OF DEVELOPMENT ASSISTANCE FOR HEALTH

In recent years, donor agencies working with developing countries have been testing—and in some cases rolling out on a

large scale—a series of innovative approaches and instruments to improve the effectiveness of DAH. Those innovations include the use of broad budgetary support to countries with strong governance and institutions, the implementation of sectorwide approaches in health, the use of performance-based financing mechanisms, a shift to direct engagement with the private sector, and the implementation of programs designed to move resources expeditiously to the frontlines of the battle for improved health (that is, to communities). Evidence on the effectiveness of those innovative approaches and the conditions under which they tend to work is starting to accumulate.

### Budget Support in Strong Policy Environments

In low-income settings where policies, governance, and institutions are sound, donors have increasingly sought to provide broad, untied, and flexible budget support to governments to help support a full public expenditure program aimed at raising the level of spending and the effectiveness of resource use for health. Frequently, this support has taken the form of PRSC operations, including grants and credits. The PRSC is typically built on the foundations of a national poverty reduction strategy that analyzes the links between poor health outcomes and income poverty and identifies policies that can improve the health of the general population, especially that of poor households. The policies are then used to design a medium-term public expenditure program or framework that, in turn, is backed by external funding from donors in the form of a PRSC.

This approach draws on three of the key lessons from decades of experience with DAH:

- A good policy environment improves the use of external financing.
- The fungibility of DAH makes it logical to allocate external funds to a general budget that prioritizes health rather than to narrow projects in the health sector.
- An integrated system for managing public finance for health improves national ownership of policies and programs to improve the health of the poor and raises the chances that such funding will be sustained over a long period and eventually will use domestic resources.

Plenty of examples are now available of the use of DAH for PRSCs that focus on improvements in health. The earliest health-oriented PRSCs were in Mozambique and Uganda, followed since by similar operations in Benin, Mauritania, and other low-income African countries. In Mauritania, for example, the country received a transfer of US\$25 million in external financing to back a public spending plan that doubled health spending from about US\$8 per capita in 2000 to US\$16 per capita in 2004. The plan also emphasized increasing health investments that are designed to lower maternal and child

deaths and combat communicable diseases by expanding rural health facilities, by providing higher pay and other incentives for health personnel working in rural areas, and by improving the availability of drug supplies at lower-level facilities. External financing was not earmarked for these actions in the health sector. Instead, the government committed itself to spending for these purposes from a consolidated national budget that was closely monitored by civil society, government officials, and donor representatives (World Bank 2004a). The early results from Mauritania are encouraging. Spending for health has risen, with most of the increase going to those parts of the country and for those kinds of services likely to have the largest effect on the health of the poorest households.

In middle-income countries, an analogous shift of DAH in strong policy environments has been the increasing use of single-tranche, programmatic, sector adjustment loans. These loans have emerged as a favored instrument for DAH in certain Latin American countries with sound management of public finances and internationally accepted procurement practices. Unlike the PRSCs, the programmatic sector loans have tended to target a single sector (such as health) or, occasionally, two sectors (such as health and education in the case of Brazil or health insurance and pensions in the case of Ecuador). Whereas the PRSCs have their analytical roots in poverty studies, the programmatic sector loans tend to be based on sector assessments. After the government has taken key legal, institutional, and spending actions to improve the efficiency of health spending or to target services for poor households, donor funds are transferred in a block or *tranche* to the government. In 2003, the World Bank approved four programmatic sector loans—for Brazil, Colombia, Ecuador, and Peru—totaling US\$900 million (D. Cotlear, personal communication, December 12, 2003).

Another recent example is the World Bank's US\$750 million Maternal and Child Insurance Program sector adjustment loan to Argentina, which followed decisions made by that government in 2003 to create a mother and child health insurance scheme for poor provinces, to increase spending for communicable diseases, and to establish a national health council to set policies on the sharing of revenues to be used for health between the central government and the provinces. The central pillar of this project, as well as the follow-on operation in 2004, is the implementation of the Maternal and Child Insurance Program. It delivers a publicly financed package of essential services to uninsured mothers and children at the provincial level. The donor funding is used in an innovative way to provide matching grants from the national to the provincial level, on the basis of a capitated payment per mother and child enrolled plus additional transfers to the province for performance. That performance is measured in terms of key health service goals (for example, coverage of vaccine programs, incidence of low birth-weight, and number of prenatal consultations). In the first four

months of program execution, more than 100,000 eligible women and children joined the insurance scheme.

### **Pooling and Donor Harmonization**

As mentioned earlier, another innovation in recent years has been the use of sectorwide approaches as a way for multiple donors to pool their funds for a commonly agreed-on program and to use similar, streamlined procedures for procurement, monitoring and evaluation, and reporting. Sectorwide approaches grew out of sector investment programs for health that were launched in the early 1990s as a way to bring donors together to support broader government objectives in health.

The main features of sectorwide approaches are as follows:

- a. a partnership among a broad coalition of donors, with the government taking the lead;
- b. a comprehensive sector policy framework to achieve goals over the short and medium terms;
- c. an agreed-on expenditure program;
- d. the improvement of management systems and capacity building (Swedish International Development Cooperation Agency 2003).

The main difference between sectorwide approaches and PRSCs is that, in the former, pooled donor funding is disbursed against specific expenditure items—for example, construction of health facilities or purchase of drugs—whereas in PRSCs, donor funds are transferred to the general budget, with disbursements triggered by policy actions.

A prime example of a sectorwide approach is the Ghana health sector support program, in which 17 donor organizations have committed US\$442 million over a five-year period to improve the health status of the population while focusing efforts on reducing inequalities in health. The program includes the following main spheres of action aimed at strengthening priority health interventions: developing human resources for health services, enhancing infrastructure and support services, fostering partnerships for health, improving regulation, reforming organizational arrangements, improving health sector financing, enhancing financial management systems, strengthening management information systems and performance monitoring, and linking with traditional medicine.

### **Performance-Based Financing**

Developing countries and their international partners are increasingly adopting methods for financing health care activities that link the availability of funding to concrete, measurable results on the ground. Such performance-based financing was advocated a decade ago in the 1993 *World Development Report* (World Bank 1993) and in other policy documents in the early 1990s, although relatively little practical knowledge of this type of financing was available at the time.

Since then, much more experimentation has taken place, and the important potential—as well as the challenges—of performance-based financing for achieving national and global health goals is becoming apparent.

Performance-based financing is now being widely and actively tested at several levels of the health care system. These tests include situations in which the following occurs:

- Governments of developing countries pay health care providers in NGOs and the private sector to deliver essential health services to poor households.
- Central governments determine the transfer of funds to local governments on the basis of their performance in strengthening health services.
- Donors release funding to recipients in developing countries as and when they achieve certain key health targets.

**Performance-Based Contracts with Nongovernmental Organizations.** A number of governments in low-income countries are funding NGOs to deliver basic health services on

a performance basis (Hecht 2004). Many of the earliest experiments are from Latin America and the Caribbean. In Haiti, for example, the government contracted NGOs to provide child health and family planning services. The government gave the NGOs an advance each year and then a quarterly sum based on a negotiated budget. At the end of the year, performance was measured against various indicators, including the extent of immunization coverage, the percentage of families using oral rehydration to treat acute diarrhea, the share of pregnant women attending prenatal care, and the average waiting times in clinics. The NGOs' performance determined the bonus they received, which could be up to 10 percent of the original negotiated budget. As a result, the Haitian NGOs made changes in their service delivery schemes and improved their performance in immunization and oral rehydration in particular (Eichler, Auxilia, and Pollack 2001). In Guatemala, the government is implementing a large performance-based program with NGOs that currently covers nearly 4 million people, mostly among the country's indigenous population (box 13.2). Similar schemes have been implemented in Argentina, El Salvador, and Nicaragua.

### **Box 13.2**

#### **Large-Scale Performance Contracting with Nongovernmental Organizations in Guatemala**

Guatemala has successfully implemented contracting on a large scale with NGOs to deliver health services. The government started the Program to Extend Coverage of Basic Health Services in 1997, soon after the end of a long civil war. The program has continued under successive administrations. By 2000, a total of 89 NGOs were involved in providing health care to about 3.7 million people under 137 contracts.

The contracts specify a range of maternal and child health services, as well as the prevention and treatment of a number of diseases, including malaria. The NGOs are paid about US\$8 per person served, mostly in cash, but also in kind in the form of such items as vaccines and medicines. Payments are released quarterly after the NGOs' performance has been checked and verified.

Performance is measured according to a series of indicators, including coverage of immunization and prenatal care, distribution of iron sulfate tablets to pregnant women and to children, and frequency of home visits by NGO outreach staff. The government has hired private firms to develop the monitoring system, which also looks at the NGOs' accounting practices.

*Source:* Hecht 2004; World Bank 2000.

The contracting system under the program appears to have resulted in important gains in health service delivery. Immunization rates rose from 69 percent in 1997 to 87 percent in 2001. Household surveys currently under way will be able to assess the program's effect on mothers' and children's health outcomes.

During the program's early years, the government had to overcome a number of obstacles. Government health workers resisted the scheme because they feared that contracting with NGOs was a hidden form of privatization of government health services. The NGOs were initially reluctant to get involved, because they thought that the government was demanding too much in the way of improved performance and also doubted that the government would pay them in a timely manner. Given the financial fragility of many local NGOs in Guatemala, the government had to make advance payments to the NGOs and release quarterly payments without delay to build confidence in the relationship between the public and private sectors.

More recently, countries in South Asia have begun to enter into performance-based health programs with NGOs. In Afghanistan, under a recently approved World Bank–financed project for health service rehabilitation, the government is contracting with NGOs to run health centers. NGOs that achieve specified targets will be eligible to receive additional payments of up to 10 percent of their baseline subsidies from the government.

In a similar vein, the central and state governments in India have started to reimburse NGOs and private providers on the basis of performance. The national TB program reimburses private laboratories for testing sputum samples to detect TB; it also pays NGOs and private doctors a fixed sum per infected patient who is cured using the directly observed short-course therapy approach. In one district of Kerala state where this scheme is well advanced, NGOs and private providers have helped boost coverage from some 55 percent of those infected with TB to 78 percent.

In Cambodia, government agreements and funding to NGOs to operate district health services showed impressive results compared with the standard approach, whereby the government ran district services. The NGOs operated in one of two ways: (a) on a fully contracted-out basis, with complete responsibility for service delivery, including hiring and firing staff members and setting wages and procuring and distributing essential drugs and supplies, or (b) through a pure management contract, in which the NGOs worked within the Ministry of Health system and had to strengthen the existing district structure. The NGOs that were fully contracted out raised immunization rates by 40 percentage points between 1997 and 2001, twice the rate of improvement produced by the government-run districts. The rate of growth in prenatal care in the contracted-out districts was more than triple that in the government-run districts, and the use of modern contraception methods expanded 50 percent more in the contracted-out districts (Bhushan, Keller, and Schwartz 2002).

**Central Government Transfers to Local Authorities.** In Brazil's Family Health Project, the central government is making per capita transfers to local municipalities on the basis of planned increases in certain services, such as safe deliveries for low-income women and poor children treated for various illnesses and monitored for their nutritional status and growth. For example, at least 40 percent of babies are to be delivered in maternity facilities managed under the government's family health program. Participating outreach workers are to provide an average of at least nine home visits to targeted low-income families each year. All doctors enrolled in the program are to undergo special training. If the municipalities reach those targets and several others, they will continue to be eligible for future financial transfers; otherwise, the level of central government support will be reduced, and remedial measures will be put in place to try to improve the targeting and effectiveness

of the activities run by the underperforming municipalities (G. M. LaForgia, personal communication, October 21, 2003).

**Donor Disbursements to National Governments and Other Recipients.** A number of innovative approaches are in place that make donor financing of health programs conditional on successful performance on the ground. One example is the World Bank's credit buy-down program for polio eradication (box 13.3).

GAVI has also been a pioneer in the performance-based approach to grant assistance. Through its sister organization, the Vaccine Fund, which raises and disburses funds for the alliance, GAVI provides commodity assistance to countries in the form of new and underused vaccines (hepatitis B, *Haemophilus influenzae* type B, and yellow fever, with new products for rotavirus and pneumococcus to follow); safe injection supplies; and support for strengthening national immunization systems. In addition, GAVI allocates grant funds to countries on the basis of their performance in increasing coverage rates for diphtheria-pertussis-tetanus immunizations. Countries' applications to GAVI specify current coverage levels. On the basis of these data, their performance is assessed annually, and US\$20 per child is given to the country for each additional child immunized with the diphtheria-pertussis-tetanus vaccine.

In 2004, GAVI made its first payment for performance verified by means of externally audited health data. Eight countries received US\$15 million in performance-based payments for their achievements in increasing immunization rates to reach an additional 750,000 children. Sierra Leone, for example, qualified for these payments on the basis of its performance in raising coverage from 44 percent of children in 2000 to 62 percent in 2002, as the country emerged from civil war (GAVI 2004a).

### **Stronger Engagement with the Private Sector**

As donors have increasingly become aware of the extent of private sector involvement in the health sector in developing countries—that is, both the share of health services delivered by private providers and the share of total health spending coming from private sources, including out-of-pocket payments—they have sought to use DAH to engage the private sector in pursuit of basic health goals.

Innovative approaches include both the transfer of development assistance to the private sector through government channels in developing countries and the provision of direct financial support to private institutions (World Bank 2003b). In the former category, social investment funds have been established in many regions as a way to channel DAH to community groups and NGOs involved in running health centers and disease control programs (Jorgensen and Domelen 2001), especially in Africa and Latin America. In a similar vein, donors

### Box 13.3

#### IDA Credit Buy-Downs for Polio Eradication

To ensure financing for the MDGs, governments, foundations, agencies, and development banks are all exploring new financing approaches that have the potential to increase resource flows, adjust the concessionality of funding (that is, reduce interest rates and thus increase the grant element) where appropriate, and help focus more attention on effects.

The IDA credit buy-down mechanism was recently piloted in several projects supporting polio eradication, clearly a global public good. The mechanism enhances the concessionality of IDA's assistance in priority areas, mobilizes additional resources from external partners, and focuses the attention of governments, partners, and World Bank staff on clearly defined performance objectives.

Working in partnership with the Bill & Melinda Gates Foundation, Rotary International, and the United

Nations Foundation, the World Bank implemented two projects in fiscal 2003, one in Pakistan and the other in Nigeria. The partnerships will buy down a country's IDA loans on successful completion of the country's polio eradication program. Because of the generous loan terms, each grant dollar unlocks roughly US\$2.50 for countries to fight polio. To fund the buy-downs, the partnership has established a trust fund with US\$25 million from the Bill & Melinda Gates Foundation and US\$25 million from Rotary International and the United Nations Foundation. This US\$50 million investment has the potential to buy down roughly US\$125 million in IDA loans. In this way, developing countries can mobilize what ultimately becomes grant funding to eradicate polio and to contribute to the global campaign to eliminate the transmission of polio.

*Source: World Bank 2004d.*

have been prime movers behind schemes to encourage governments to contract with NGOs and private hospitals and laboratories for basic services targeted to the poor, such as cataract surgery and TB case detection and treatment in India (Central TB Division 2002; World Bank 2002).

In terms of direct DAH financing to the private sector in developing countries, the most common and longstanding examples are in the social marketing of health-related personal products, such as contraceptives, kits for treating sexually transmitted infections, insecticide-impregnated bednets to prevent malaria, and point-of-use water purification kits. Donors are currently providing millions of dollars each year to subsidize the purchase of these items by poor families in developing countries. More recently, other donor engagements with the private sector have included the Global Alliance for Improved Nutrition, in which a consortium of donors that includes the Bill & Melinda Gates Foundation and the governments of Canada, the Netherlands, and the United States have pooled funds that can be used to expand the fortification of basic foods with micronutrients by private manufacturers. The Global Alliance for Improved Nutrition is helping to fortify wheat with iron in western China and in Morocco and fish sauce with vitamin A in Vietnam.

Another recent example of DAH going directly to the private sector is Avahan, the innovative AIDS prevention program that the Bill & Melinda Gates Foundation is financing in six Indian states. The program uses external financing to leverage

financial and in-kind support from major Indian companies that can then be used to support a range of HIV prevention programs, such as condom promotion, peer education, and voluntary counseling and testing targeted at truck drivers, commercial sex workers, and others at high risk (Sengupta and Sinha 2004).

The other area in which donor funds are increasingly being used to stimulate private sector action and leverage private funding is through public-private partnerships for new health technologies, including vaccines, drugs, and diagnostics. Private financing, technical input, and management make sense in this area, because typically it is the private sector that has the technical knowledge and the manufacturing and distribution capacity to create and market new health products, but major scientific risks and the lack of an attractive market in poor countries are barriers to investment. The public-private partnerships aim to overcome those barriers through a combination of up-front financing for R&D (so-called push funding) and market guarantees for effective products (so-called pull financing). The 20 largest partnerships for new products have raised more than US\$1.5 billion over the past decade and are beginning to see results, such as the development of new drugs for malaria and TB, promising vaccines for malaria and AIDS, and microbicides to protect against HIV infection (IPPPH 2004; Rockefeller Foundation 2004). The largest partnership, the IAVI, illustrates the innovative nature of these partnerships and the effective use of DAH (box 13.4).

## Box 13.4

### The International AIDS Vaccine Initiative

The International AIDS Vaccine Initiative was established in 1996 with support from the Rockefeller Foundation as an innovative way to give a boost to AIDS vaccine R&D. Optimism about AIDS vaccines in the late 1980s had given way to a series of failures and to discouragement by the end of the decade. R&D efforts were spending less than US\$100 million a year. Neither governments nor private vaccine companies were investing much in research into AIDS vaccines.

IAVI's mission was defined as ensuring the development of a safe, effective, and accessible vaccine for use throughout the world. IAVI's activities were to include a combination of global advocacy, policy analysis and reform, and investments in carefully chosen R&D projects focusing on the most promising vaccine candidates.

IAVI's collaboration with the private sector has occurred at several levels. Funding for IAVI has come from six governments (Canada, Denmark, the Netherlands, Norway, the United Kingdom, and the United States); the European Union; and the World Bank, as well as from private foundations and companies. IAVI's vaccine development partnerships take many forms. They typically include an academic developer and a biotechnology company, plus researchers, laboratories, and clinical trial sites in developing countries such as India, Kenya, and Uganda. Private companies generally manufacture test lots of the AIDS vaccines and undertake bioengineering studies and enhancements to the vaccine. IAVI generally shares the risks and costs of the partnerships with the private code-

*Source: IAVI 2004.*

velopers, while ensuring that developing countries will have access to the vaccine at an affordable price if it turns out to be effective.

Since IAVI embarked on these vaccine development partnerships in 1999, it has spent a total of about US\$200 million in this area. Five vaccine candidates are undergoing clinical trials in eight countries in Africa, Asia, Europe, and North America. IAVI is poised to spend another US\$300 million in R&D during 2005–7 in an effort to accelerate the discovery, development, and licensing of a vaccine to prevent HIV infection. IAVI is also trying to stimulate expanded use of donor funding for R&D in the field of AIDS vaccines and is calling for governments to increase public financing from the current amount of around US\$600 million a year to US\$1.2 billion annually. At the same time, IAVI has proposed that donors create a purchase fund of several billion dollars to serve as a promise to buy large numbers of doses of an efficacious vaccine from qualified manufacturers. The U.K. government has committed itself to joining such an advance purchase fund and is urging others to join it (“Gordon Brown to Earmark” 2004).

The health and economic stakes are enormous. Without improved HIV prevention tools, an additional 100 million HIV infections are likely over the next two decades, resulting in huge economic losses. IAVI estimates that an efficacious vaccine could prevent 2 million AIDS deaths a year and generate billions of dollars in lives saved and antiretroviral treatment costs averted.

### Getting Funds to the Front Line

Central government funds can easily leak as they move through the pipeline from the center to local levels. In addition, in the absence of local initiative and the right incentives, service provision can fail to reflect the views of local people. Effective DAH needs to address those impediments. It needs to channel technologies, ideas, finance, and technical assistance closer to households, health providers, and supervisory officials in ways that are consistent with national policies and are amenable to monitoring and reporting.

Development assistance for health is more likely to reach communities if they have the following:

- a decentralized system of fiduciary and technical management in the public sector

- a strong financial capacity in NGOs and private providers in cases in which the government's strategy for local development is to rely on private institutions
- a government body that is appropriately equipped and responsible for regulating the quality of public and private providers
- a balanced approach to community-driven development in health to ensure that financing for community health initiatives of the social fund type is sustainable.

Examples of DAH reaching frontline workers in an expeditious and sustainable way include block grants for districts in Uganda; social development funds in Central America; contracts with urban and rural NGOs under India's Reproductive and Child Health Program; and support to community-led

initiatives under the Multi-Country AIDS Program, which financed an average of 10,000 local initiatives in each of its first four years in several African countries (World Bank 2004c).

## CONCLUSIONS

Despite the promising trends in DAH over the past five to seven years, the outlook for the next few years is uncertain. What happens will depend on overall trends and innovations in development assistance, which in turn are driven by such factors as political changes and the rate of economic growth in OECD countries, and the willingness of high-income countries to honor their pledges to increase the share of GDP they devote to development.

Under most scenarios, the share of overall assistance going to health will likely continue its recent rise, given the current political focus on the global AIDS pandemic and the growing awareness of the challenges and opportunities associated with the MDGs for maternal and child health and communicable diseases.

Under a more conservative scenario, a number of factors could have a negative impact on DAH. Those factors could include an overall slowing in the rate of growth of development financing and the donor fatigue that could set in if the larger allocations for HIV/AIDS, TB, and malaria are not fully disbursed, are misused, or yield disappointing results on the ground.

Under a more optimistic scenario, DAH will continue to grow as developing countries and donors find new ways to disburse a higher volume of funds and use them effectively—for example, through subcontracts with NGOs and private health service delivery organizations. Sectorwide approaches and budget support through national poverty reduction programs may also result in expanded flows of DAH. New generations of technologies adapted to the developing world, such as more effective antimalarials, better TB diagnostics, and a vaccine to prevent HIV infection, would almost certainly attract increasing amounts of DAH.

Even under the more optimistic scenario, DAH will still face major challenges. The expected volume of financial assistance is unlikely to match the large needs of the developing world and the requirements to attain the MDGs. Countries and donors will therefore face difficult decisions in relation to priority setting and require better tools to make such allocation decisions. Cost-effectiveness analysis offers one such tool. Effective absorption of DAH will also continue to pose difficulties for countries with weak capacity. In such cases, increased use of NGOs and the private sector in general to complement public sector action may help make the information and services that poor households need to improve their health status more accessible.

Another issue is that the current architecture of development assistance does not contain a mechanism to ensure that

adequate funds flow to the upstream stages of R&D on new health technologies, where the private sector lacks the market incentives to invest and where national research bodies have so far not been up to the task. The multilateral banks do not have the instruments to channel major funding to global, as opposed to national, health technology programs, and the bilateral agencies alone are not equal to this task. Even with the modest external funds allocated to the recently established public-private partnerships (such as the IAVI, the Medicines for Malaria Venture, the Global TB Drug Alliance, and the International Partnership for Microbicides), new technologies are emerging. However, they need to be reinforced with additional funding. One option would be to design a new funding facility within the multilateral banks that would allow them to allocate significant resources to global health research and product development. Another would be to use the nascent international finance facility to provide funds for global research.

To address those challenges, strong political will is the essential baseline ingredient, as recent experience with HIV/AIDS has clearly demonstrated. The United Nations and the multilateral agencies must remain firmly behind more robust DAH, as they are currently doing by means of the Millennium Project and the High-Level Forum on the Health-Related MDGs. Individual bilateral donors and foundations must continue to demonstrate their leadership. Finally, and perhaps most important, leaders and civil society organizations in poor countries need to continue to speak out for more and more effective DAH, indicating that health is their priority and that they are prepared to commit domestic resources to match the larger external flows provided through DAH.

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