

## Public health

## Defining and refining international donor support for combating the AIDS pandemic

Amir Attaran, Jeffrey Sachs

**The international aid effort against AIDS is greatly incommensurate with the severity of the epidemic. Drawing on the data that international aid donors self-reported to the Organization for Economic Cooperation and Development (OECD), we find that, between 1996 and 1998, finance from all rich countries to sub-Saharan Africa for projects designated as AIDS control averaged US\$69 million annually, and, assuming a safe margin for under-reporting and misreporting, we estimate that total donor spending on HIV/AIDS control was perhaps twice that at most. Since the late 1980s, aid levels have dropped relative to the prevalence of HIV infection, and stood recently at about \$3 per HIV-infected person. Lack of finance is now the primary constraint on progress against AIDS, notwithstanding the widespread belief that a lack of interest from the governments of poor countries is limiting. We argue that to produce a meaningful response to the pandemic, international assistance must be based on grants, not loans, for the poorest countries; be increased within the next 3 years to a minimum of \$7.5 billion or more; be directed toward funding projects which are proposed and desired by the affected countries themselves, and which are judged as having epidemiological merit against the pandemic by a panel of independent scientific experts; and fund concurrent needs, including prevention, drug treatment (such as highly active antiretroviral therapy), and blocking mother-to-child HIV transmission. An effort of this scope and scale will both radically alter the prospects for intervention against AIDS in poor countries, and together with comparable efforts to control other infectious diseases, is easily afforded by the OECD donor economies, whose aggregate national income recently surpassed \$21 trillion annually.**

17 years after HIV was identified, AIDS has finally seized the attention of the international aid community. The reasons for the sharp increase in attention to AIDS are clear: worldwide, about 35 million people are now HIV positive, and of those, 95% live in less-developed countries, with most in sub-Saharan Africa.<sup>1</sup> AIDS is accomplishing a sweeping undoing of past human development advances, especially in southern Africa. Life expectancy has plummeted 20 years or more in heavily affected countries ([www.undp.org/popin/popdiv/hivmtg/aidsrep.pdf](http://www.undp.org/popin/popdiv/hivmtg/aidsrep.pdf), accessed Dec 21). In Zimbabwe and Botswana, 70% or more of teenage children are forecasted to die of AIDS.<sup>1</sup> Education is being undermined, since teachers in Zambia die of AIDS nearly as rapidly as they can be trained.<sup>2</sup> Even peace is threatened, as a future generation of "AIDS orphans" mature without the guidance of their parents to rebuild or fight over the societies and resources of Africa.<sup>3</sup>

As the World Bank put it, "AIDS has already reversed 30 years of hard-won social progress in some countries".<sup>4</sup> It is now at the very centre of a global "development crisis", and one that is hitting the world's poorest countries the hardest.

Yet, while this pandemic has been unfolding, the fight against AIDS has been substantially under-financed by governments within the heavily affected regions, and by

the donor community. It is hard to calculate the precise donor sums that have been directed towards AIDS control, since some broadly defined health-sector projects have been used in part to support AIDS control efforts without being designated as AIDS control programmes. We do know, however, that programmes explicitly designated by donors as AIDS control programmes amounted to only about US\$170 million annually, on average, during 1996–98, with about \$77 million going to low-income countries, and about \$69 million to sub-Saharan Africa. For sub-Saharan Africa, this figure amounts to about \$3 per HIV-infected person in 1998. The total amount of international aid to deal with the pandemic in poor countries may have been up to twice that reported amount: perhaps \$150 million per year for the low-income countries, but probably even less than that. A bold increase in donor support is clearly needed, and one larger and swifter than is underway.

### Reporting methods

There are currently 22 wealthy donor countries and one donor region (the European Union) represented in the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD), which is the global "club" for donors of official development assistance (ODA). Between them, the DAC donors committed about \$52 billion of ODA in 1998 for all purposes. This amount represents all aid to all of the traditional development priorities, including governance, infrastructure, agriculture, education, and health. It comprises aid defined as both outright grants, and loans with below-market interest rates for which the grant-like component exceeds 25% of the face value of the loan.

It is possible to break down this total ODA into its

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Center for International Development, Harvard University,  
Cambridge, MA 02138, USA (A Attaran LLB, Prof J Sachs PhD)  
Correspondence to: Dr Amir Attaran  
([amir\\_attaran@harvard.edu](mailto:amir_attaran@harvard.edu))

Source of uncertainty	Effect (+/-)	Magnitude of uncertainty
Category 13040 includes both HIV/AIDS projects and sexually-transmitted diseases.	+	Small. Most of projects are for HIV/AIDS.*
CRS data reflect donor commitments, not actual disbursements.	+	Moderate. Disbursal delays or cancellations occur for all donors. In a World Bank study, cancellations ranged from 1-80% in a small sample of projects.
Category 13040 includes only those projects with a predominant sexually-transmitted diseases or AIDS focus.	+/- (net -)	Moderate. Applies to multipurpose projects only. If AIDS component is predominant but <100%, all 100% is counted in 13040. Conversely, if AIDS component is present but not predominant, 0% is counted in 13040.
Some donors erroneously omit HIV/AIDS projects that should be reported in category 13040.	-	Small. Data verified when donors' enter it, when OECD review sit, and on authors' further review.
CRS data do not include all donor contributions routed through the core budget of the United Nations system.	-	Small. United Nations core budgets are not often used to channel project funds. OECD estimates 10% error.

\*Authors' observation. CRS=Creditor Reporting System database.

Table 1: Potential sources of misestimation of HIV/AIDS data in CRS

constituent parts, project by project. By prior agreement, the DAC donors self-report concise details of each aid project they fund to the Creditor Reporting System database (CRS), which summarises the level of individual donor commitments by purpose, recipient country, donor country, and type of allocation ([www.oecd.org/dac/hm/crs.htm](http://www.oecd.org/dac/hm/crs.htm), accessed Dec 22). The OECD estimates that the CRS health sector data are about 80% complete up to 1998—the last year for which we present data (unpublished OECD report, September, 2000). Therefore, although we cannot guarantee that the CRS data are complete, we can be confident that the donors themselves have reported to the CRS most of their commitments toward AIDS, making these the best data obtainable.

Our analysis focuses on a single data category within the CRS (number 13040), which aims to capture “all activities related to sexually transmitted diseases and HIV/AIDS control, for example, information, education and communication; testing; prevention; treatment, [and] care” (unpublished OECD report, September, 2000). We obtained data for 626 projects in category 13040, for all least-developed and low-income countries from 1987 to 1998. Within this category, some sources of uncertainty could cause our reported figures to either overestimate or underestimate the true level of aid for HIV/AIDS (table 1).

Leaving aside occasional discrepancies in what donors choose to report to category 13040 (probably the largest discrepancy is a \$64.5 million World Bank loan to Zimbabwe in 1993 for control of sexually transmitted diseases, including AIDS, which the Bank did not report to the CRS. The loan is not currently listed among projects on the Bank's AIDS web page, suggesting the omission may be intentional (<http://www.worldbank.org/aids>). Two sources of structural uncertainty are particularly important. The first is that the CRS data comprise donor commitments, not actual disbursements, which can be much lower because of disbursal delays or cancellations. A recent World Bank analysis of four AIDS-related projects found cancellations ranging from 1.3 to 81.7% of the value of commitment.<sup>5</sup> Although not necessarily representative,

cancellations trouble all aid donors to some degree, and result in the CRS data overstating the actual aid flows. The second uncertainty results from a CRS reporting rule that requires DAC donors to categorise the whole of an aid project (100% of the commitment) in accordance with its predominant component. For projects comprising both AIDS and non-AIDS components, this “all or nothing” rule leads to rounding errors, depending on whether the AIDS component is predominant (upward rounding within category 13040, to 100%) or not (downward rounding to zero). In practice, we conservatively assume that a moderate net underestimation results. Taking the illustrative example of the World Bank again, of about \$314 million in AIDS lending to countries eligible for reduced interest loans between 1986 and 1996, about \$49 million (or 16%) was committed as a small component of multipurpose projects, and would thus be excluded from category 13040.<sup>5</sup> We are unable to estimate how frequent the converse situation is, where small non-AIDS components are included in category 13040, but any such amounts would obviously reduce this source of error in our estimates.

Taking all this into account, we accept the conservative interpretation that our sums under category 13040 moderately understate ODA support for AIDS. The understatement may be in the range of 50%, but probably not more than that. But even if the amounts committed and disbursed were twice the levels reported (which we very strongly doubt), the conclusions of our analysis—that donor support for AIDS was small and sometimes declining during the 1990s, and that a major increase in support is now needed—would be unchanged.

### Levels of donor support for AIDS control

It is widely recognised that the scope of the AIDS problem makes it impossible for poor countries to respond sufficiently out of their domestic resources. Countries such as Nigeria, Tanzania, and Ghana all have annual public-sector health budgets of about \$8 per head, and this budget must serve all health needs, not just AIDS.<sup>6</sup> We

Year	All sources total	Grant sources*			Loans from World Bank* total	
		Total	Tied	Untied		
1990	17 711	17 711	9428	8282	8560	0
1991	35 938	35 938	16 310	9296	10 332	0
1992	121 847	37 847	18 955	7487	2612	84 000
1993	42 073	42 073	31 490	3226	3070	0
1994	143 868	67 568	29 761	27 908	19 909	76 300
1995	114 779	74 779	21 086	28 654	21 807	40 000
1996	46 138	46 138	26 153	11 654	12 388	0
1997	80 786	80 786	44 640	20 108	16 048	0
1998	102 977	102 977	23 787	17 234	49 379	0

Source: OECD, Development Assistance Committee, Creditor Reporting System.  
\*Numbers are thousands of US\$.

Table 2: Overseas development budgets for sexually-transmitted disease control, including HIV/AIDS, in least developed and other low-income countries (1990-98)

Year	All sources total	Grant sources*			Loans from World Bank* total	
		Total	Tied	Untied		
1990	28 889	28 889	10 799	18 089	9931	0
1991	38 427	38 427	18 785	9310	10 332	0
1992	53 710	53 710	14 835	22 558	2612	0
1993	39 145	39 145	28 093	3424	3073	0
1994	162 519	86 219	46 425	28 274	28 064	76 300
1995	139 300	99 300	25 727	43 063	28 205	40 000
1996	43 709	43 709	25 628	10 460	8868	0
1997	88 327	88 327	49 042	22 291	18 109	0
1998	73 862	73 862	24 677	20 561	17 227	0

Source: OECD, Development Assistance Committee, Creditor Reporting System.  
\*Thousands of US\$.

Table 3: Overseas development budgets for sexually-transmitted disease control, including HIV/AIDS, in sub-Saharan Africa (1990-98)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Donor Total
USA	11.96	29.08	21.95	32.97	112.81	86.48	76.67	96.81	77.87	546.59
World Bank	..	..	84.00	..	76.30	40.00	..	..	..	200.30
European Union	..	4.94	28.99	16.95	6.34	14.42	4.42	1.66	35.55	113.27
Netherlands	..	0.16	4.52	2.17	16.54	13.89	9.00	12.95	12.32	71.55
Sweden	0.68	11.25	23.32	6.72	2.05	7.95	0.90	8.63	7.28	68.77
Canada	14.65	..	1.14	0.19	3.18	36.40	7.03	3.68	0.69	66.96
Germany	..	..	..	..	7.40	13.88	6.65	22.94	15.78	66.63
UK	0.44	..	..	..	..	13.30	7.01	2.50	37.19	60.44
Norway	12.16	..	0.90	1.03	7.61	16.02	12.97	3.12	5.14	58.94
France	0.40	5.85	4.91	2.65	17.09	8.88	0.59	7.88	4.75	53.00
Australia	1.95	0.87	3.20	5.98	21.37	3.80	2.92	3.39	6.81	50.28
Denmark	..	10.33	6.93	2.97	5.20	3.96	..	0.40	2.17	31.97
Belgium	..	..	..	..	..	..	3.07	2.90	3.43	9.40
Italy	..	0.12	..	..	..	..	1.05	0.25	0.09	1.50
Spain	..	..	..	..	..	..	..	0.69	0.65	1.34
Switzerland	0.08	0.28	0.08	0.30	..	0.22	..	0.03	..	0.98
Finland	..	0.08	..	..	..	..	..	..	0.48	0.57
New Zealand	..	..	..	..	..	0.01	..	..	..	0.01
Japan	..	..	..	..	..	..	..	..	..	0
Austria	..	..	..	..	..	..	..	..	..	0
Luxembourg	..	..	..	..	..	..	..	..	..	0
Portugal	..	..	..	..	..	..	..	..	..	0
Ireland	..	..	..	..	..	..	..	..	..	0
Annual total	42.32	62.97	179.94	71.93	275.88	259.20	132.26	167.81	210.20	1402.50

Source: OECD, Development Assistance Committee, Creditor Reporting System. Numbers are millions of US\$.

Table 4: All donors and lenders (1990–98) and all allocations to recipient countries

have estimated elsewhere that the average public-sector spending of the least-developed countries on health is around \$7 per head (unpublished data).

The CRS data from category 13040 show that there is little aid funding to deal with the AIDS pandemic in poor countries. During 1990–98, the worldwide ODA budget dedicated specifically to controlling AIDS in least-developed and other low-income countries never exceeded \$144 million annually, and averaged just \$78 million annually (table 2). Similarly low aid figures pertain to sub-Saharan Africa, where UNAIDS now estimates that about 25 million people live with the virus.<sup>1</sup> Total international aid during 1990–98 in programmes designated as HIV/AIDS control efforts averaged only \$74 million annually, including commitments to regional institutions such as the Southern African Development Community, middle-income countries like South Africa and Botswana, and Africa's neighbouring island states (table 3). If loans are excluded to leave just grants, or outright giving, this number falls to just \$61 million annually. Also much of this is "tied aid", aid that must be spent on goods or services supplied by the donor country from abroad, which limits its benefits to the local economy.

From analyses of individual years, it is also clear that the commitments of many donors have been sporadic throughout the 1990s (table 4). Total aid dedicated to AIDS rose and then fell several times in the decade, by a factor of two or more. The World Bank furnished just three dedicated AIDS control loans to sub-Saharan Africa between 1990 and 1998 (to Burkina Faso and Uganda in 1994, and Kenya in 1995), although these contributions were supplemented by numerous multipurpose loans with a small (mostly less than \$2 million) AIDS component. Among DAC countries, Japan, Austria, Luxembourg, Ireland, and Portugal did not report committing any funds specifically toward AIDS. This is especially surprising from Japan, which is the world's largest aid donor in absolute terms. Unexpectedly, the private sector, which is often criticised for offering too little philanthropy on AIDS, is in many cases more generous than governments. One company (Bristol Myers Squibb) has committed \$37 million of grants since mid-1999, which is more than that of some DAC governments ([www.securethefuture.com/appgra/data/appgra.htm](http://www.securethefuture.com/appgra/data/appgra.htm), accessed Dec 22).

The international community is certainly aware that ODA commitments for AIDS are low, although its previous estimates might have overestimated the actual amounts. A useful study published by UNAIDS found that for a given subset of DAC donors and recipient countries, bilateral aid in 1996 amounted to \$79 million in sub-Saharan Africa, \$33 million in Asia and the Pacific, and \$10 million in Latin America.<sup>7</sup> By contrast, the CRS data hold these figures to be lower: just \$37 million, \$7 million, and \$1 million, respectively. We believe that the truth is probably somewhere in between the CRS numbers and the UNAIDS numbers, since UNAIDS bases its figures on the assumption (not supported by data within the report) that 25% of "integrated [health] project funds" typically went for HIV/AIDS control—an assumption that may well be too high. Even if we arbitrarily inflate the CRS estimates by 50% (a larger margin than our identification of sources of uncertainty would forecast), we find that total ODA for HIV/AIDS in sub-Saharan Africa was in the order of \$110 million per year during 1996–98, less than \$5 per HIV-infected individual in 1998.

But whatever the exact amount, there is no doubt that the funding has been very low, and that in the words of UNAIDS, it "[has] not kept up with the growth of the epidemic". The UNAIDS data found that donor assistance per HIV-infected person declined by over 50% between 1988 and 1997, to less than \$10 per HIV-infected person—and even this is probably an

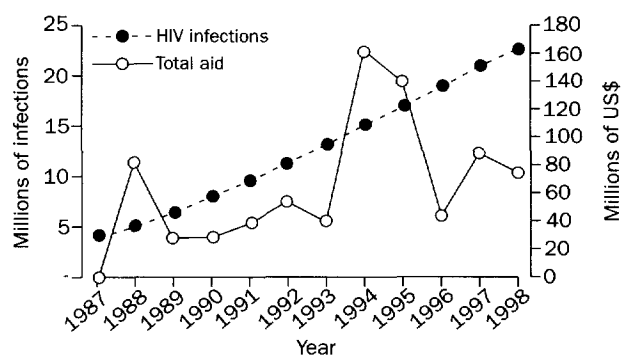


Figure 1: Official development assistance compared with HIV prevalence in sub-Saharan Africa (1987–98)

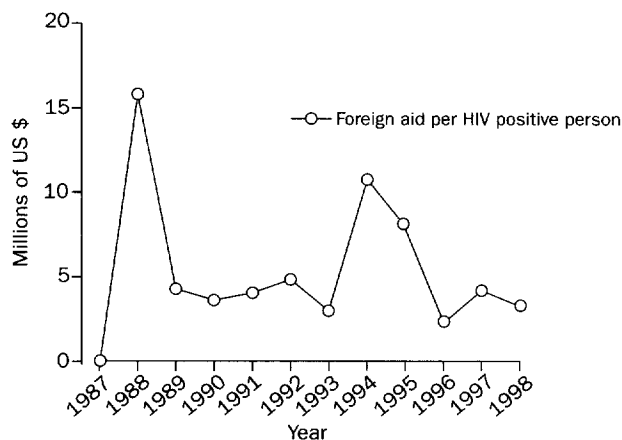


Figure 2: Time-averaged official development assistance per HIV infection in sub-Saharan Africa (1987-98)

overestimate. Undoubtedly, while HIV prevalence in sub-Saharan Africa has grown into a pandemic, ODA support fluctuated widely but without much upward trend (figure 1). No discernible attempt was made in the 1990s to increase donor flows once it became clear that existing aid flows were insufficient to slow the disease's advance. By 1998, the aid effort in sub-Saharan Africa amounted to just over \$3 per HIV-infected person according to the CRS data (figure 2).

These low funding levels are, obviously, incommensurate with the severity of the AIDS pandemic. But why has actual funding been so low? Part of the reason, which is often stressed by donor agencies, has been "the reluctance of [seriously affected] governments to confront AIDS and a failure to prioritize activities in the face of severe financial and administrative constraints".<sup>8</sup> We agree there is some truth in this: at different times and places, national leaders were reluctant to discuss the disease because of its taboo association with promiscuity, extramarital sex, rape, homosexuality, interference with sexual relations, &c, and this reticence impaired efforts to control the disease.

Nevertheless, we believe that a close reading of the history of the pandemic suggests that donor priorities and financial stringency, at least as much as issues within recipient countries, brought about the past and present low levels of aid funding, which in turn has contributed to the present pandemic.

The history of the WHO Global Programme on AIDS (GPA) illustrates how receptive the governments of many less-developed countries were to confront AIDS, even in the disease's early years. Within a year of GPA's founding in 1986, an overwhelming 170 countries requested assistance to develop responses against AIDS.<sup>9</sup> GPA responded by providing technical and organisational guidance to establish national AIDS programmes in at least 151 countries (Erik Blas, personal communication). It then moved into the area traditionally occupied by international aid donors (perhaps prompting jealousy and its eventual demise), and by 1992 it had approved or given small funding (up to \$1 million) to 123 ongoing AIDS control plans. All these programmes and plans, importantly, were triggered by requests from HIV-affected governments themselves. Had donors decided to promote GPA with grants at an adequate level, rather than cutting GPA's budget in 1990, a commensurate response to control AIDS throughout Africa might have started one decade earlier.<sup>10</sup> Instead, GPA was disbanded in 1995 to make way for the severely underfunded

UNAIDS partnership, which today has a budget smaller than GPA did.

Another part of the problem is that many aid donors fail to base their funding decisions on scientific opinion. Although many epidemiologists predicted spectacular rises in HIV infection, of 15 bilateral donor agencies surveyed by UNAIDS, "less than half . . . considered the severity of the epidemic as one of the criteria for allocating resources" to AIDS control efforts.<sup>3</sup> This lack of attention to epidemiology may explain why some donors failed to foresee the striking increase in African HIV prevalence and to increase their funding accordingly.

Many donor agencies are also slow to turn life-saving scientific discoveries into funded interventions on an expedited basis. Evidence has been accumulating since 1994 that antiretroviral drugs, such as zidovudine or nevirapine, can reduce the frequency of mother-to-child transmission of HIV at birth by nearly 70% ([www.hivatis.org](http://www.hivatis.org), public health service task force recommendations for the use of antiretroviral drugs in pregnant women infected with HIV-1 for maternal health and for reducing perinatal HIV-1 transmission in the United States, accessed Dec 22). Years later, few, if any, of the world's major aid agencies have provided the funds to deploy this life-saving technology on a large scale. Despite nevirapine costing only \$4 per intervention and being available for free through corporate philanthropy, without wealthy governments offering aid to distribute the drug, only a few developing countries can implement control of mother-to-child transmission out of their own resources.<sup>11,12</sup> The disjunction between science and many donors' funding priorities has kept this extremely inexpensive intervention out of the hands of seriously affected poor countries for years, costing many childhood lives.

### An urgent scaling up of AIDS control

The energetic history of the GPA, as well as the many declarations and pleas for help on AIDS (<http://209.27.118.7/bibintro.htm>, accessed Dec 22), can leave no further doubt that a number of deserving, and poor, countries are enthusiastic to engage AIDS more vigorously than present funds allow. When the board of the World Bank approved its first Multi-Country AIDS Program in 2000—a new and flexible mechanism to help increase funding and speed disbursements from the World Bank—half a dozen African countries lined up for the funds almost immediately, and more are expected to do so ([www.worldbank.org/aids](http://www.worldbank.org/aids)). The pent-up demand for donors to furnish aid is huge.

We believe that to satisfy this demand, and do so effectively and efficiently, requires two major changes in how aid is planned and delivered. The first is to incorporate both recipient country priorities and scientific assessment into the process. The second is to offer grants rather than loans to the poorest countries. Together, these steps imply a third conclusion: the need for a substantial increase in the level of international support for AIDS control. The needs might be as high as \$10 billion annually in the next few years, to stanch the epidemic and treat the millions of people who are already HIV positive. As we will note, however, even \$10 billion a year is easily affordable by the rich countries.

The first change is simply procedural, and recognises the truism that the most successful aid projects are those that are what the recipient country wants; are within that country's capacity to perform; and are scientifically sound, in that there is scientific evidence that the selected interventions are effective. Indeed, it is in the donor's own

interest that all of these criteria be right, if the donor is to show results and not a failed or underperforming project.

We therefore suggest that a "bottom-up" approach, where recipient countries themselves propose the anti-AIDS actions they want to do, is superior to a "top-down" approach, where the donor sets the priorities. This is because government and civil society based in recipient countries are better placed than foreign donors to know their cultural and social practices (major determinants in AIDS control efforts) and also the limits of their implementation capacity. Incorporating this knowledge *ab initio* tailors the project more nearly to local needs and abilities and helps secure political ownership, all of which contribute to success. To ensure the resultant country-driven proposals will actually be effective against AIDS if funded we strongly urge that donors arrange under UNAIDS auspices, for proposals to be reviewed by panels of independent experts in AIDS control, much like peer review in scientific research. The panels should have the power to recommend projects to donors, or to encourage countries to amend and improve a proposal (with expert assistance if necessary), and should not typically reject flawed proposals outright. Setting up this procedural dialogue between an independent expert panel and the recipient country can help steer funding in a way that matches the course of the pandemic, and can accelerate the use of promising new interventions shortly after their discovery—useful fixes to the current aid system, which too often subordinates scientific knowledge to other matters in project design. As a precedent, we note that the GPA incorporated both country-driven proposals and systematic scientific review, and it worked with good speed.

We believe that these procedural changes will greatly enhance the number and quality of AIDS control proposals deserving of international aid. This is critical, for if rich country taxpayers are to back a greatly expanded AIDS control programme—and we believe that they will—the public in those countries must be assured that the resulting projects will be both politically and scientifically likely to succeed.

Also, since AIDS is hitting many of the poorest countries in the world, we believe that any assistance to control the disease in these countries should be provided as grants, and not loans. The current drive to cancel the debt of the world's poorest countries reflects the truth that they are not creditworthy and they should not be burdened with new debt at a time when the economic adversity of AIDS is undermining their capacity to generate income. Yet donor nations have been slow to incorporate this fact into AIDS policy, and when the World Bank recently attempted the laudable step of giving post-conflict African countries grants to fight AIDS, certain wealthy governments required the World Bank to withdraw those plans ([www-wds.worldbank.org/pdf\\_content/00009494600080305414991/multi\\_page.pdf](http://www-wds.worldbank.org/pdf_content/00009494600080305414991/multi_page.pdf), accessed Dec 22).

What seriously affected poor countries need are both more grant finance assistance for projects against AIDS, and different procedures to engage the full benefit of scientific knowledge in those projects. Because of the economic complexity, it is not yet possible to offer a highly precise estimate of the total costs of a full programme of HIV prevention, AIDS treatment, and community support, supported by operational research on

an ongoing basis. UNAIDS has estimated that a programme in Africa "just the most basic prevention and care" necessitates \$3 billion annually ([www.unaids.org/whatsnew/speeches/eng/durban\\_piot\\_100700.html](http://www.unaids.org/whatsnew/speeches/eng/durban_piot_100700.html), accessed Dec 22). However, this figure excludes highly active antiretroviral therapy (HAART), which we regard as indispensable to help the millions already infected with HIV. HAART would at once improve parental survival and mitigate the crisis of AIDS orphans, and by decreasing viral loads in the male and female genital tract, it would probably slow the further sexual transmission of the virus.<sup>13,14</sup> Crudely assuming HAART and palliative treatment for 5 million people at a reduced price of \$500 per year, plus prevention for 500 million people at \$10 per year, a global budget of \$7.5 billion annually seems reasonable to aim for immediately and achieve in no more than 3 years. This figure is about congruent with the "African Consensus" of health ministers and heads of state themselves at a sponsored Economic Commission for Africa in December, 2000. And although the bill seems large, it is under 0.04% of the combined GNP of the DAC countries in 1998 (\$21 trillion)—or just 4 cents per every \$100 of national income of the donor countries ([http://www.unaids.org/whatsnew/adf/files/ADF\\_Consensus.us.doc](http://www.unaids.org/whatsnew/adf/files/ADF_Consensus.us.doc), accessed Dec 22). In macroeconomic and not impoverished public-health terms, this is eminently affordable, as would be a similarly expanded effort for other badly underfunded infectious diseases (AIDS is but one example, and is almost certainly better funded than others).<sup>15</sup> Humanity demands it be done without delay.

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