

Financial Requirements to Fight HIV/AIDS: A Reality Check

Funds available for HIV/AIDS programmes in low and middle-income countries rose from \$US300 million in 1996 to \$US10 billion in 2007. However, a combination of global economic uncertainty, a global food crisis and a literature increasingly reflecting discontent with progress in fighting the HIV/AIDS pandemic will not only likely limit increases in the overall availability of both donor and national funds, but will also increase the competition for resources during the ramp-up to Universal Access. This will put increased pressure on UNAIDS in its presentation and justification of resource requirements for HIV/AIDS programming. This paper reviews UNAIDS' 2007 estimates of resource requirements for fighting the HIV/AIDS epidemic in terms of its usefulness to both donor and recipient governments for budget planning and for setting priorities within the HIV/AIDS programme. The paper identifies weaknesses in the UNAIDS estimates with respect to financial transparency and to cost-effectiveness analysis for priority setting and recommends changes to improve both budgeting and priority setting.

Background

The fight against HIV and AIDS has been successful in attracting resources, with funding for programmes in low and middle income countries increasing from \$US300 million¹ in 1996 to \$US10 billion in 2007. However, when UNAIDS publishes the planned 2008 revision² of its "Financial Resources Required to Achieve Universal Access to HIV Prevention, Treatment, Care and Support"³, fund-raisers for HIV/AIDS programmes will be facing a more difficult international fund-raising environment, reshaped by a threatened global economic downturn, a global food crisis, and a growing literature of discontent with the progress achieved in the fight against HIV/AIDS.

The first of the three factors is an expected global economic downturn. A recent UN report⁴ describes the world as "teetering on the brink" of an economic downturn affecting both developed and developing economies. An OECD Economic Outlook⁵ report released in June 2008 forecasts "several quarters of weak growth" for most OECD countries. Weak growth rates will likely result in failures by governments to meet aid pledges made during more prosperous times.

The second factor is the recent rapid increase in food prices, particularly for food grains. The international community is treating the food crisis as a long-term issue. The Lancet, in an April 2008 editorial, reflected the current international opinion: "The era of cheap food is over... it is no surprise that the situation is at the top of the international agenda."⁶ Other international leaders have highlighted the seriousness of the current food shortages. The Director-General of WHO has identified the food crisis as "looming on the horizon"⁷, while the Director-General of FAO has warned that the crisis could affect 862 million people and that failure to deal with it could "endanger world peace and security"⁸ For the foreseeable future food aid and agricultural development will be a serious competitor with HIV/AIDS for international and local funding.

The third factor is the recent publication of a number of books and articles critical of progress in the fight against HIV/AIDS and of the role of UNAIDS. Recent books by Chin⁹, Epstein¹⁰ and Pisani¹¹ question the effectiveness of existing HIV prevention programmes, particularly in sub-Saharan Africa. The books portray UNAIDS as manipulating data to enhance HIV awareness and fund-raising. Two recent articles also take up these themes. Potts *et al.*¹² call for major revisions of UNAIDS HIV prevention priorities. England¹³ goes further, calling for the dismantling of UNAIDS.

UNAIDS is the international focal-point for the collection of HIV/AIDS statistics, the development of HIV/AIDS projections and the estimation of short and long-term financing required for the fight against HIV/AIDS in low and middle income countries.¹⁴ Its estimates of HIV/AIDS programme funding requirements are the only estimates provided by the United Nations and are widely assumed to be authoritative. The estimates are a reference point for both donors and recipient governments and are widely cited in scientific journals and the media^{15 16}. In this context, the response of UNAIDS to the changing funding climate is critical to the continued successful funding of HIV/AIDS programmes

The 2007 Report

The UNAIDS estimate of resources is the main support document for fund-raising for international HIV/AIDS programmes, as such it should at least meet the basic criteria required by donors in a funding request. Criteria vary, but most donors would expect budgetary transparency and an identification and ranking of priorities. Budget transparency would include: 1) a summary budget, including a table of annual and total expenditures and an estimate of donor/recipient cost-sharing; 2) a detailed presentation of annual costs, and; 3) where the financial commitment extends beyond the time period of the proposal, an estimate of requirements to the expected end of the financial commitment. The establishment of priorities would require an estimate of outcomes, a cost-effectiveness evaluation of the proposed expenditure, and an economic and scientific justification of programme options selected.

The 2007 report presents three possible HIV/AIDS prevention and treatment scenarios composed of five components. The three scenarios are: 1) scaling-up HIV prevention and AIDS treatment at current rates; 2) Universal Access by 2010, and; 3) phased scale-up of Universal Access to 2015. No components are provided for the first scenario, but scenarios two and three are divided into: 1) prevention; 2) treatment and care; 3) orphans and vulnerable children; 4) programmatic activities; and 5) prevention of violence against women. Low, medium, and high costs are estimated for each scenario. Only a medium cost estimate is provided for the components. The estimates are for 2008/2015.

UNAIDS 2007 estimates of financial requirements do not begin to meet the minimum standards for budget transparency or identifying priorities. Among other weaknesses: 1) the financial requirements estimates in the main report are incomplete --the report provides only partial cost data and overall totals are missing; 2) disaggregated costs are incomplete; 3) there are no indications of required commitments beyond 2015; 4) data on selected outputs is provided, but this is mislabeled as “outcomes”, but no outcome or benefit information is provided, and; 5) the 11 “methodological annexes” provide little information on costs and none on outcomes.

Financial Transparency

Although the report provides a graph showing estimated medium annual resource requirements for the three scenarios, actual figures are provided only for 2010 and 2015 for the current-trend scenario and for 2008, 2009, 2010 and 2015 for the Universal Access by 2010 and phased scale-up scenarios. The methodological annexes do not provide data to support the estimates used in the main document and the main document does not include the necessary data to prepare an overview. However, it is possible to prepare a first estimate of the missing cost estimates and programme totals. Assuming that the annual estimates increase from year-to-year, a preliminary estimate of the missing data can be calculated using linear interpolation. (A graph of the calculated medium cost data for the three scenarios is practically identical to the graph in the report.) Table 1 presents an overview including the missing estimates and totals.

Table 1—Low, Medium and High Estimates of Financial Resources Required for HIV/AIDS Programming (\$US Billions)

Year	Universal Access 2010			Scaled Access 2015			Current Trend		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
2007	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
2008	17.4	20.2	21.0	14.1	16.7	18.3	11.1	11.8	12.5
2009	24.7	30.2	31.9	18.1	22.2	26.5	12.3	13.6	15.1
2010	36.1	42.3	51.4	21.5	28.4	34.6	13.4	15.4	17.6
Sub Total	78.2	92.7	104.3	53.7	67.3	79.4	36.8	40.8	45.2
2011	37.8	44.6	53.8	25.4	32.6	39.3	14.5	16.8	19.5
2012	39.5	47.0	56.2	29.3	36.8	44.0	15.6	18.2	21.3
2013	41.1	49.3	58.5	33.1	41.0	48.7	16.6	19.7	23.2
2014	42.8	51.7	60.9	37.0	45.2	53.4	17.7	21.1	25.0
2015	44.5	54.0	63.3	40.9	49.4	58.1	18.8	22.5	26.9
Sub Total	205.7	246.6	292.7	165.7	205.0	243.5	83.2	98.3	115.9
Grand Total	283.9	339.3	397.0	219.4	272.3	322.9	120.0	139.1	161.1

Source: Data in bold type was provided by UNAIDS in the main report while data with a shaded background has been estimated by the author.

The missing total costs of each of the five programme components for 2008/2015 have also been calculated using linear interpolation for the medium cost estimates for the universal access and phased scale-up scenarios (the only data available). The cost-share of each component is shown in Table 2.

Table 2: Share of costs by component for medium cost scenarios –2008-2015

	HIV Prevention	Treatment and Care	Orphans	Programme Costs	PVAW*	Total
Universal Access	32.6%	38.9%	9.0%	17.0%	2.5%	100.0%
Phased Scale Up	35.9%	36.2%	8.9%	17.1%	2.0%	100.0%

Source: Calculated by author. *PVAW: Prevention of violence against women

The report provides no discussion of the wide range in estimated costs between scenarios. UNAIDS assumes that the donors share would be two-thirds of the estimated annual requirements. As a comparison, FAO is requesting donors to provide \$US30 billion a year¹⁷ to deal with the food crisis. This is equivalent to an annual donor's share of a \$US45 billion UNAIDS estimate. For 2008 through 2010 the estimated requirements presented by FAO are larger than the annual estimated donor shares for all of the UNAIDS scenarios but the 2010 high cost estimate for Universal Access. Donors are clearly going to be under pressure to provide much higher levels of total aid than foreseen even a few months ago.

While the selection by UNAIDS of 2015 as the final date for the estimates is consistent with the "time-bound" targets of the Millennium Development Goals, longer projections are needed to give governments and donors a realistic idea of what a commitment to one of the scenarios involves in the long-run. Given the UNAIDS estimate of eight years from HIV infection to the need for ART, the projection to 2015 includes treatment only for people living with HIV/AIDS who were HIV positive by 2007, thus the estimates do not reflect the impact on future financial requirements of the success or failure of HIV prevention activities between 2008 and 2015 or the long-run cost implications of ART. Over^{18 19} has argued that without effective prevention programmes long-term ART costs can become overwhelming, particularly as donors incur long term moral commitments once they begin funding treatment.

Setting Priorities

Budget documents and resource requirements estimates should provide a basis for choosing between scenarios. Best practice normally requires a cost- effectiveness analysis. Although UNAIDS argues that its "outcome" data "permits an assessment of what present efforts are likely to accomplish by the middle of the next decade" (p. 12), there is nothing in the document which provides for setting priorities based on the cost-effectiveness of the different activities, nor which indicates the status of the epidemic after implementation. Nor does the document provide data for selecting between different activities in case of a funding shortfall. Outcome data, which would include estimates of additional years of life lived and infections averted and their related costs, is required to assess the impact of different scenarios, and is essential for setting priorities within the HIV/AIDS programme.

There is data in the methodological annex on treatment which could be used to develop a cost-effectiveness study, but the annex on prevention provides no unit cost data or estimates of

outcomes not even for prevention of mother-to-child transmission for which both outcome and unit cost estimates are well documented. On the cost side, although the report presents data on medical staff requirements for treatment, no similar data is available for medically intensive prevention activities such as male circumcision or prevention of mother-to-child transmission. There is also no information on the impact of these activities in preventing infection. The data presented on persons receiving ART, people trained, etc. shows only whether UNAIDS' output targets have been met and not the impact of selected activities on the epidemic.

The issue of impact assessment was raised as a comment to a draft of the UNAIDS report in a letter to UNAIDS and WHO²⁰ signed by more than 100 NGOs: "Show the world the options before us, the benefits of keeping our promises, the cost of achieving international commitments and the terrible human and social costs of failing to do so. We also ask that UNAIDS and WHO share their data sources used to develop these scenarios. Such transparency of information is important for everyone to understand your assumptions and collaborate fully with you to refine the scenarios."

Conclusions/Recommendations

The period 2008 to 2010 is critical for the planned ramp-up to Universal Access. As fundraising for international development activities becomes more competitive, the role of the UNAIDS estimates of resource requirements to fight HIV/AIDS will become more important. Both donors and recipient governments will wish to use the estimates as guidelines, or if they develop their own estimates, benchmarks. For its estimates to be credible, UNAIDS must adopt a policy of complete transparency or its credibility will be undermined.

At a minimum, the estimates should present a number of well-defined options for HIV prevention, AIDS treatment, and other activities which are deemed by UNAIDS to be important in the fight against HIV/AIDS. These options should be fully costed, including an estimate of funding responsibilities between donors and recipients, with supporting documentation annexed to the report. Every option should have sufficient documentation to permit users of the report to recreate the estimates. These estimates should also spell out the projected long-term cost implications of committing to the option, including an assessment by UNAIDS of their confidence in the projections.

Every programme option presented should be accompanied by an estimate of outcomes, either in terms of infections averted (for prevention) or additional extra years of life lived (for treatment). The baseline from which each outcome is measured should be well defined. The literature on treatment costs and outcomes is well developed, however the parallel literature on prevention is still developing. Calculating credible outcome estimates for prevention activities will be a challenge, but the measures of impact are crucial for setting priorities. Estimates of required resources are of little use unless they also provide a basis for decision-making.

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