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This report forms part of a set of documents created specifically for the first replenishment meeting:

- *HIV/AIDS, Tuberculosis and Malaria: The Status and Impact of the Three Diseases* — contains essential background information such as disease burdens, impact on societies and economies, global response and interventions.
- *Investing in The Future: The Global Fund at Three Years* — a review of the Global Fund's challenges, progress and achievements to date, with focus on the first Phase 2-eligible grants.
- *Addressing HIV/AIDS, Malaria and Tuberculosis: the Resource Needs of the Global Fund, 2005–2007* — calculation of resource needs based on current operational projections for the Global Fund, complemented by calculations of the total global resource needs for AIDS, tuberculosis and malaria.
- *Replenishing the Global Fund: An Independent Assessment* — an external assessment of the Global Fund, focusing on issues, strengths, weaknesses, opportunities and problems.
- *A Technical Note on Financial Management of the Global Fund* — an overview of fiduciary arrangements including fiscal management, funding policy, and financing options.

All numbers used in the documents are estimates based on best available information at February 2005.

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# List of abbreviations

<b>ACT</b>	Artemisinin Combination Therapy
<b>AIDS</b>	Acquired Immunodeficiency Syndrome
<b>ARV</b>	Antiretroviral
<b>ART</b>	Anti Retroviral Treatment
<b>CCM</b>	Country Coordinating Mechanism
<b>CIDA</b>	Canadian International Development Agency
<b>CFP</b>	Comprehensive Funding Policy
<b>DFID</b>	UK Department for International Development
<b>DOTS</b>	Directly Observed Treatment, Short-Course ( WHO-recommended TB control strategy)
<b>GDP</b>	Gross Domestic Product
<b>HBCs</b>	High Burden Countries
<b>HIV</b>	Human Immunodeficiency Virus
<b>IEC</b>	Information, Education, Communication
<b>IRS</b>	Indoor Residual Spraying
<b>ITN</b>	Insecticide Treated Nets
<b>LLIN</b>	Long Lasting Insecticidal Net
<b>MDGs</b>	Millennium Development Goals
<b>MDR-TB</b>	Multidrug-Resistance TB
<b>MSM</b>	Men who have sex with men
<b>MTCT</b>	Mother-to-Child-Transmission
<b>PEPFAR</b>	President's Emergency Plan for AIDS Relief
<b>RBM</b>	Roll Back Malaria
<b>RDT</b>	Rapid Diagnostic Testing
<b>STI</b>	Sexually Transmitted Infection
<b>TB</b>	Tuberculosis
<b>TRP</b>	Technical Review Panel
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>UNICEF</b>	The United Nations Children's Fund
<b>USAID</b>	United States Agency for International Development
<b>VCT</b>	Voluntary Counseling and Testing
<b>WHO</b>	World Health Organization
<b>“3 by 5”</b>	Global initiative to get 3 million people on ART by the end of 2005

# 1.0 Executive Summary

## 1.1 THE GLOBAL FUND'S MANDATE

The purpose of the Global Fund is to attract, manage and disburse resources through a new public-private foundation that will make a sustainable and significant contribution to the reduction of infections, illness and death, thereby mitigating the impact caused by HIV/AIDS, tuberculosis and malaria in countries in need, and contributing to poverty reduction as part of the Millennium Development Goals established by the United Nations (*By-laws Article 2, January 2002*).

## 1.2 THE GLOBAL FUND IN CONTEXT

The Global Fund is part of concerted efforts to address the total global resource needs in the fight against AIDS, TB and malaria, alongside important partners such as WHO, UNAIDS and its co-sponsors including the World Bank, as well as other multi- and bilateral agencies. In 2004, the Global Fund contributed approximately 45% of all international funding for malaria, 66% for tuberculosis and 20% for HIV/AIDS. With cumulative disbursements in excess of US\$ 900 million at the end of February 2005, the Global Fund has been able to contribute substantially to the global efforts to fight AIDS, TB and malaria.

The Global Fund has already enabled:

- 130,000 people to gain access to lifelong antiretroviral treatment
- 1 million people to be reached with HIV testing and counseling
- 385,000 people to be treated for tuberculosis under DOTS (the WHO-recommended TB control strategy)
- 300,000 people to be treated for malaria with third-generation artemisinin-based combination therapy (ACT)
- 1,350,000 insecticide-treated bednets to be distributed to prevent malaria transmission.

In addition, Global Fund financing has enabled grant-funded recipients to reach tens of millions of people through a wide range of prevention programs, including behavior change campaigns, community outreach, condom distribution, targeted support for people at highest risk for HIV infection such as injecting drug users, sex workers and mobile populations, school programs for children and young people, and community and media awareness-raising campaigns.

Impressive as this may seem, it is only a moderate contribution compared to total global needs, and global efforts have to scale up considerably to reach internationally agreed targets and finally to turn the tide of these pandemics.

### TEXT BOX 1: DEFINITIONS OF TERMS

**Approval** denotes that the Board accepts a grant proposal, typically over five years, and mandates the Secretariat to discuss and sign a grant agreement with the grantee for an initial 2-year phase, or for a grant's extension into its second phase (typically three years).

**Commitment** is used in the Global Fund context in this document and elsewhere only to refer to its process of setting aside large amounts of resources to fully cover future disbursements of approved and signed grants. This process is driven by the requirements of the Comprehensive Funding Policy (see Appendix 6.2). The Policy is currently under review.

**Disbursement** means the transfer in instalments of the approved grant amount from the Trustee to the grant recipient. Disbursements commence after signature of a grant agreement, and are made at intervals throughout its duration.

**A pledge** is the promise of a donor to make a contribution to the Global Fund.

**Contribution** is a donation to the Global Fund in the form of cash or public promissory notes payable on demand (see paragraph 3.3.4 for information on promissory notes).

# This paper presents an assessment of the Global Fund's resource needs covering the first replenishment cycle 2006–2007 and addressing specific resource needs in 2005.

### 1.3 TWO COMPLEMENTARY PROJECTIONS OF GLOBAL FUND RESOURCE NEEDS

The calculation of resource needs based on current operational projections for the Global Fund is complemented by calculations of the Global Fund's share of total global resource needs for AIDS, TB and malaria. In close collaboration with our partners UNAIDS, Roll Back Malaria, Stop TB and WHO, models are presented for a realistic scale-up of resources that would enable significant progress in terms of access to prevention, care and treatment. For 2007 a moderate assessment of required external resources for all three diseases (excluding research and development efforts) totals US\$ 14.9 billion (excluding domestic resources). This would include US\$ 11.5 billion for HIV/AIDS, US\$ 2.6 billion for malaria and a minimum of US\$ 0.8 billion for TB.

### 1.4 ANNUAL NEED BASED ON EXPERIENCE OF THE GLOBAL FUND GRANT CYCLE

The Global Fund has developed a grant cycle based on the principles of country ownership, partnership with other key institutions and performance-based disbursements for programs developed to achieve clear targets. It is still a young organization with most of its grants less than 12 months old and with the annual total of disbursements projected to be US\$ 1.2 billion in 2005, US\$ 2.3 billion in 2006 and rising to US\$ 2.9 billion for 2007.

**Based on its experience with four rounds of funding in 2002–2004, on estimates for renewals of successful ongoing programs and estimates for new funding rounds, an annual need of US\$ 3.5 billion for 2006 and US\$ 3.6 billion for 2007 is calculated.** Currently (at 28 February 2005) pledges for these years stand at US\$ 0.7 billion for 2006 and US\$ 0.4 billion for 2007. Therefore, with operating expenses factored into the projection, additional pledges of US\$ 2.9 billion for 2006 and US\$ 3.3 billion for 2007 would be required to enable the Global Fund to continue with its current model of renewing successful programs and inviting one to two rounds per year for new programs.

For 2005, grant approvals will include one new proposal round and a large number of grant renewals from Rounds 1, 2 and 3 as they reach 20 months after the grant start date (generally taken as the date of first disbursement). **Based on these assumptions, the funding need for 2005 will be US\$ 2.3 billion.**

The value of proposals over time is predicted by the Global Fund and its partners to increase for a number of reasons (described in paragraph 3.2.2), including increased country capacity and improved technical assistance. However, in 2007 less resources will flow into countries for renewals (see footnote, Table 1). Country needs, though, can be anticipated to be expressed in quality proposals in one or more rounds depending on Global Fund Board decisions and are likely to be significantly higher than in previous years. The combined value of new proposals and renewed grants each year is predicted to rise as indicated below.

**TABLE 1: GLOBAL FUND MINIMUM RESOURCE NEED FOR GRANT APPROVAL CAPACITY, 2005–2007**

ESTIMATED GRANT APPROVALS: (US\$ BILLION)	2005	2006	2007
New grant proposals (Phase 1)	1.0	1.1	2.6
Renewal of grants (Phase 2)	1.3	2.4	1.0
<b>Total approval capacity needed</b>	<b>\$bn 2.3</b>	<b>3.5</b>	<b>3.6</b>

*Note: Renewal of grants in 2007 is lower than in 2006 because the approval of new grants in 2005 (Round 5) is planned for the end of the year. Accordingly only a relatively small proportion of Round 5 grants will be reaching the end of their initial two years, and hence be due for renewal, in 2007.*

Pledges to the Global Fund for 2005 and beyond cover only part of its resource need, leaving substantial additional pledges needed to provide sufficient grant approval capacity. Pledges to date (at 28 February 2005) amount to US\$ 1.3 billion, and US\$ 0.1 billion will be available from 2004 pledges expected to be contributed in 2005. Therefore the current shortfall of resources for 2005 amounts to US\$ 0.9 billion.

### 1.5 FULFILLMENT OF THE GLOBAL FUND'S PURPOSE

UNAIDS, Roll Back Malaria and Stop TB have defined essential interventions and plans to effectively address HIV/AIDS, malaria and tuberculosis. The estimated minimum global external resources required for these plans amount to US\$ 13.4 billion in 2006 and US\$ 14.9 billion in 2007<sup>1</sup>. Implementation of these interventions would lead to the achievement of important targets including:

- reaching 71% of comprehensive prevention coverage targets in HIV/AIDS by 2007<sup>2</sup>
- to halve TB mortality and prevalence and begin to reverse TB incidence by 2015
- to halve malaria morbidity and mortality by 2010.

Resources provided by the Global Fund together with resources from other institutions and implemented by many different partners around the world would provide a significant contribution to the achievement of the Millennium Development Goals (MDGs). In particular, Goal No.6 (see Appendix

6.2), stating “By 2015, to have halted and begun to reverse the spread of HIV/AIDS and the incidence of malaria and other diseases” could be achieved for TB and malaria and build the foundation for reaching the HIV/AIDS goal.

Meeting the MDGs for the three diseases will also have a significant impact on other MDGs. For example, achieving goals for reductions in child and maternal mortality in Africa will require controlling HIV/AIDS and malaria, both leading causes of death. Among young adults, tuberculosis and HIV/AIDS are also major causes for morbidity and mortality. Failure to lessen the impact of these diseases will render MDGs for the reduction of poverty, the achievement of educational targets and food security unreachable.

### 1.6 ANNUAL NEED BASED ON CONSTANT GLOBAL FUND SHARES OF THE INTERNATIONAL RESOURCES FOR THE THREE DISEASES

Currently the Global Fund has an average funding share of the global external resource needs for all three diseases as follows: approximately 45% for malaria, 66% for tuberculosis and 20% for HIV/AIDS. Applying these shares to the value of global need for external international resources of US\$ 13.4 billion in 2006 and US\$ 14.9 billion in 2007 would lead to Global Fund resource needs of US\$ 3.6 billion in 2006 and US\$ 4.0 billion in 2007 for the Global Fund.

These estimates, derived from partners' projections of global resource needs and current donor sources, are complementary to calculations based on the Global Fund's experience with its current grant cycles. Both models give funding needs in the range of US\$ 3.5 –

4.0 billion and lead to the conclusion that this level of resources would be appropriate, enabling the Global Fund to contribute significantly to the achievements of the MDGs as part of a strong international effort.

**TABLE 2: SHORTFALL IN GLOBAL FUND RESOURCE NEEDS (US\$ BILLION), 2005–2007**

FUNDING SHORTFALL : (US\$ BILLION)	2005	2006	2007
Total grant approval capacity needed (per above)	2.3	3.5	3.6
Operating Expenses, less Interest <sup>(1)</sup>		0.1	0.1
Less: Funds available from prior year	-0.1		
<b>Total contributions needed</b>	<b>2.2</b>	<b>3.6</b>	<b>3.7</b>
Less: Pledged <sup>(2)</sup> to date (23 Feb 2005)	-1.3	-0.7	-0.4
<b>Additional pledges needed</b>	<b>\$bn 0.9</b>	<b>2.9</b>	<b>3.3</b>

<sup>(1)</sup> Operating Expenses, less Interest Income: Projected at \$30m to \$70m per year, depending on usage of promissory notes (increased usage would reduce the cash balance and hence reduce interest income). The 2005 amount rounds down to zero; the 2006 & 2007 amounts, assuming an increasing usage of promissory round up to \$0.1bn. Operating Expenses comprise Local Fund Agent fees and Board, Technical Review panel and Secretariat expenses.

<sup>(2)</sup> The 2005 pledge amount includes \$0.1 bn of 2004 pledges expected to be contributed in 2005.

<sup>1</sup> Excluding substantial research and development needs.

<sup>2</sup> The target for treatment, care and support is still under consideration by UNAIDS and WHO and will be released for a meeting on March 9 in London.

# 2.0 Methodology

This report presents two complementary approaches to estimating the resource needs of the Global Fund for 2005–2007. The resource needs estimate based on experience of the Global Fund grant cycle is complementary to partners' estimates of total need.

## APPROACH 1: BASED ON EXPERIENCE OF THE GLOBAL FUND GRANT CYCLE

**2.1** One approach estimates how much the Global Fund requires to address country needs based on experience to date as expressed in funding proposals and approved grants, in accordance with the Global Fund's key principles. This “bottom-up” approach responds to existing resource gaps in eligible countries that are not covered by domestic or external resources provided by other multi- or bilateral donors, as reflected in proposals to the Global Fund. The resource needs as estimated by this approach are outlined in Section 3 and reflect Global Fund projections that the value of proposals at upcoming rounds will increase, building on investments made by programs at previous rounds in infrastructure, absorptive capacity and treatment scale-up.

## APPROACH 2: BASED ON THE GLOBAL FUND'S SHARE OF GLOBAL NEED

**2.2** To validate the results of the bottom-up approach, the Global Fund's resource needs are also calculated as part of the total resource needs required effectively to address AIDS, tuberculosis and malaria. These are outlined in Section 4. The Global Fund has worked on methodologies and calculations with the most authoritative partner organizations: WHO, UNAIDS, and the Roll Back Malaria and Stop TB Partnerships (see Text Box 2). The current share of the Global Fund in the provision of external resources has thus been jointly determined and applied to the growing resource needs for all three diseases.

**2.3** The resource needs described here are typically based on meeting targets set by international partners within specific time frames. In general, they rely on models that use fixed unit costs and predicted coverage data to generate estimates of what levels of spending are required to meet the stated targets. All of the numbers are estimates based on best available information at February 2005.

**2.4** The estimates derived from this approach are outlined in Section 4, which presents total needs for HIV/AIDS and tuberculosis, and incremental costs for malaria. Incremental costing methodology estimates what additional resources are required, over current spending. This method presents limitations, as it is often difficult to determine actual spending. However, this is less problematic for malaria, where current spending is a small proportion of the resources required to meet needs.

**TEXT BOX 2: GLOBAL FUND PARTNERS COLLABORATING IN ESTIMATIONS OF GLOBAL NEED**

**Roll Back Malaria** The Roll Back Malaria Partnership hosted by the RBM Department of WHO, comprising more than 90 partners representing endemic countries, bilateral and non-governmental organizations, the private sector, academia and international organizations, was launched in 1998 by WHO, UNICEF, UNDP and the World Bank. Partners work together towards internationally agreed malaria-control objectives, coordinating activities to ensure optimal use of resources. The WHO Roll Back Malaria Department is responsible for malaria policy and strategy formulation, operations support and capacity development. The RBM Department establishes best practices for scaling up interventions based on WHO policies, normative standards and guidelines for malaria prevention and control, including monitoring and evaluation. The Department also estimates future resource needs for malaria control.

**Stop TB** Stop TB is a global movement to accelerate social and political action to stop the unnecessary spread of tuberculosis around the world. The Stop TB Partnership is hosted by the Stop TB Department of the World Health Organization. As for RBM, WHO pursues normative, technical assistance, and monitoring and evaluation functions (including tracking of resources available to WHO Member States for TB control). The Partnership involves all those organizations and individuals committed to short- and long-term measures required to control and eventually eliminate TB as a public health problem in the world. There are over 300 partners today, including the 22 top high TB burden countries, bilateral and multi-lateral agencies (including WHO, UNAIDS, the World Bank and the Global Fund), NGOs, technical agencies, corporate and community partners. Several coalitions of partners (Working Groups) have emerged to accelerate progress in specific areas, including DOTS expansion, new TB drug development, and containment of TB-HIV and MDR-TB emergencies, advocacy and communications and resource mobilization.

**UNAIDS** The Joint United Nations Programme on HIV/AIDS (UNAIDS), is the main advocate for global action on the epidemic. It leads, strengthens and supports an expanded response aimed at preventing transmission of HIV, providing care and support, reducing the vulnerability of individuals and communities to HIV/AIDS and alleviating the impact of the epidemic. UNAIDS supports

a more effective global response to AIDS through leadership and advocacy for effective action on the epidemic; strategic information to guide efforts against AIDS worldwide; tracking, monitoring and evaluation of the epidemic and of responses to it; civil society engagement and partnership development; and mobilization of resources to support an effective response. UNAIDS is an innovative joint venture of the United Nations family. The Programme brings together the efforts and resources of ten UN system organizations to help the world prevent new HIV infections, care for those already infected and mitigate the impact of the epidemic. The ten UNAIDS cosponsoring organizations are: Office of the United Nations High Commissioner for Refugees (UNHCR); United Nations Children's Fund (UNICEF); World Food Programme (WFP); United Nations Development Programme (UNDP); United Nations Population Fund (UNFPA); United Nations Office on Drugs and Crime (UNODC); International Labour Organization (ILO); United Nations Educational, Scientific and Cultural Organization (UNESCO); World Health Organization (WHO) and the World Bank.

**World Health Organization HIV Program** The WHO provides leadership for matters involving the health sector, including the development of normative and technical guidance and the delivery of technical assistance to countries. The HIV Department of WHO develops policy and strategies, operations support and capacity development related to scaling up HIV treatment and prevention. In September 2003, WHO declared the lack of HIV treatment a global health emergency. In December 2003, WHO and UNAIDS launched the "3 by 5" initiative that set a target to have 3 million people on HIV treatment by the end of 2005. As such WHO is the technical UN lead agency on issues pertaining to HIV treatment scale-up. WHO works with numerous partners in supporting national HIV prevention and treatment scale-up efforts, along with reinforcing the underlying health system. WHO routinely collects HIV surveillance, monitoring and evaluation data, and tracks these scale-up efforts. In so doing, WHO works closely with UNAIDS and other partners in estimating epidemiological and tracking program impact. WHO HIV efforts span many departments in its headquarters, as well as its regional and country offices.

# 3.0 Resource Needs Based On Experience of the Global Fund Grant Cycle

Experience of the Global Fund Grant Cycle to date yields an estimation of need as being US\$ 3.5 billion for 2006 and US\$ 3.6 billion for 2007

## 3.1 COUNTRY-DEVELOPED PROPOSALS AS THE BASIS FOR INDICATING THE RESOURCE GAP

**3.1.1** The Global Fund was created on the principle of country ownership. The Global Fund does not assess the country needs, nor does it impose any programs or determine a specific amount available for funding. The Global Fund asks countries with a significant disease burden eligible for funding to determine their own priorities and resource gap, and to submit proposals with concrete interventions and targets. The Fund publishes an estimate of available resources at the launch of each round of funding but it does not set any ceilings for funding in any given country. It is left to the country to apply for required amounts based on their national priorities and capacity to use the resources for effective programs.

**3.1.2** The essential structure for an application to the Global Fund is the Country Coordinating Mechanism (CCM). Global Fund guidelines for CCMs require that the national government, civil society, the private sector and other relevant partners be represented in the CCM. Usually multilateral partners (UNAIDS, WHO and the World Bank) and bilateral agencies providing significant financial contributions to that country are also represented. This mechanism seeks to ensure that applications take into account domestic resources and the contribution of civil society as well as external resources from multi- and bilateral sources. Applications to the Global Fund are meant to identify and address existing resource gaps.

**The amount of a funding proposal in any specific round can be taken as an approximation of the resource gap identified at a particular point in time in a country submitting a proposal to the Global Fund.**

**3.1.3** The applications submitted to the Global Fund are sent to an independent Technical Review Panel (TRP) that assesses the applications based on two main criteria: technical merit and capacity to implement. The Technical Review Panel includes experts with long experience and proven expertise in the three diseases but they also draw on additional information from multilateral partners concerning country-specific aspects.

**3.1.4** Over the four rounds of funding applications to date, the TRP has recommended to the Board for approval 40% on average of the total amount applied for in the reviewed programs (see Table 3). The unsuccessful proposals have been rejected because of shortcomings in technical quality or because of concerns regarding capacity for implementation. To date, the resources available to the Global Fund at each round of funding applications have been sufficient to allow the Board to approve all proposals recommended by the TRP.

**Therefore the amounts approved can be taken as an approximation of absorptive or distributive capacity in the eligible countries. The first test for this hypothesis is the review of all programs approaching a decision on possible renewal after the first two years (see *Investing in our Future: The Global Fund at Three Years* for an analysis of the first 27 Phase 2-eligible grants).**

**3.1.5** The Global Fund has recognized from the outset that investments in human resource development and health infrastructure are absolutely essential to achieving disease-specific targets. Hence the policies of the Fund allow the inclusion in grants of specific resources addressing infrastructure needs, including support for training and running costs such as salaries.

## 3.0 Resource Needs Based On Experience of the Global Fund Grant Cycle

TABLE 3: TOTAL VALUE OF REVIEWED AND APPROVED PROPOSALS TO THE GLOBAL FUND IN ROUNDS 1–4

PROPOSALS REVIEWED BY THE TECHNICAL REVIEW PANEL AND APPROVED BY THE BOARD (BUDGET TOTALS BY ROUND)				
US\$ billion	Budget for first 2 years of proposal ("Phase I")		Budget for entire life of proposal (usually 5 years)	
	Reviewed	Approved	Reviewed	Approved
Round 1	1.6	0.6	4.0	1.6
Round 2	2.2	0.9	5.1	2.0
Round 3	1.9	0.6	4.8	1.6
Round 4	2.7	1.0	6.4	3.0
<b>Total</b>	\$bn	8.4	3.1	20.3
<b>Approved as % of Reviewed:</b>				<b>40%</b>
<i>Note: Approved proposals receive grant funding initially for the first two years only (Phase I), with the possibility of renewal for the remainder of the proposal life (Phase II).</i>				

In Rounds 1–4, approved grant budgets included, on average, 20% for human resource development and training and 13% for physical infrastructure.

**3.1.6** Since the Global Fund has indicated its willingness to invest in long-term support for training, human resources and other ongoing costs — but is at the same time still a young organization — it is extremely important that trust be built in its long-term sustainability and funding level. The replenishment is a crucial element for this strategy. Such long-term commitments on the part of grant recipients require a high level of confidence in the availability of sufficient grant funding in the future. One of the most significant problems of development assistance has been its volatility and unpredictability.

### 3.2 RESOURCES NEEDED FOR GRANT APPROVALS THROUGH 2007

**3.2.1** Applying the principles outlined above, the Global Fund has approved four rounds of grants with

a total value of US\$ 3.1 billion committed to the initial two years (Phase 1) of the approved programs in 127 countries. Programs approaching the end of Phase 1 can apply for a second phase of funding (usually for years three to five). Provided the programs have achieved acceptable results, the Global Fund can approve additional (Phase 2) funding for completion of the (typically five-year) program. The Global Fund estimates that 85% (by value) of grants will show sufficient progress to merit renewal of the grant for Phase 2. These renewals have preference over new rounds of grants in a resource-constrained environment, should that arise. Phase 2 renewals will be a major element of the Global Fund's resource needs from 2005 onwards.

**3.2.2** In addition to the Phase 2 renewal of grants, the Global Fund expects to approve at least one to two new rounds of grants per year of increasing value. (These grants would become eligible for renewal two years later, with anticipated funding needs at the time of renewal shown.) It is expected that the value of total dollar amounts per round submitted to and approved

by the Global Fund will increase gradually for a number of reasons:

1. Increased capacity is predicted at country level due to Global Fund investment in human resources and infrastructure. These investments enable grant recipients to scale up programs.
2. Increased country capacity is also the result of technical assistance and support at country level by partners including civil society, the private sector, WHO, UNAIDS, Roll Back Malaria and Stop TB Partnerships, and many others, within the context of scale-up efforts such as “3 by 5”.
3. The technical competence and quality of country proposals is predicted to increase, as lessons are learned at every round both by program proposers and their advising partners, and that this would result in the greater total value of approved proposals.
4. The introduction and implementation of essential new technologies such as artemisinin combination therapy (ACT) and long-lasting insecticidal nets (LLINs) will drive increased expenditures in

program budgets. There will also be an increase in treatment costs where numbers of AIDS patients will need to switch to second line drug regimens, and where an increasing number of TB patients require treatment for multi-drug resistant disease.

5. The spread of the three diseases impels recipient countries to greater efforts to respond to global need and to submit proposals of greater scope. This predicted increase is also evidenced in projections of global resource needs presented in this document by our partners UNAIDS, WHO, Stop TB and Roll Back Malaria.

The increased need predicted above for forthcoming rounds of funding applications is expressed in estimates of their total value thus: US\$ 1 billion for one round in 2005, US\$ 1.1 billion for one round in 2006 and thereafter one or more rounds in 2007 with a total value of US\$ 2.6 billion.

**3.2.3** Taking account of gradual scale-up of anticipated new grant rounds and renewals of existing grants, the Global Fund has a minimum resource need for total grant approval capacity (see paragraph 1.4) in 2005–2007 as follows:

ESTIMATED GRANT APPROVALS: (US\$ BILLION)	2005	2006	2007
New grant rounds (Phase I) <sup>(1)</sup>	1.0	1.1	2.6
Renewal of grants (Phase II) <sup>(2)</sup>	1.3	2.4	1.0
	<b>2.2</b>	<b>3.6</b>	<b>3.7</b>

<sup>(1)</sup> It is assumed that Round 5 grants will be approved in 2005, Round 6 in 2006 and Rounds 7 & 8 in 2007. The total value of grants approved for Phase I of each round (the initial two years) is assumed to be \$1 billion for Round 5, \$1.1 billion for Round 6 and \$1.3 billion for each of Rounds 7 & 8.

<sup>(2)</sup> It is assumed that 85% by value of grants will be renewed for Phase II (usually years 3 to 5) and that renewal is approved twenty months after the first disbursement. Renewal of grants in 2007 is lower than in 2006 because the approval of new grants in 2005 (Round 5) is planned for the end of the year. Accordingly only a relatively small proportion of Round 5 grants will be reaching the end of their initial two years, and hence be due for renewal, in 2007.

## 3.0 Resource Needs Based On Experience of the Global Fund Grant Cycle

**3.2.4** Pledges to date cover only part of the resource need, leaving substantial additional pledges needed in order to provide sufficient grant approval capacity:

**3.3.2 Approval capacity and contributions:** In accordance with the policy outlined above, grant approval capacity is determined by the uncommitted

FUNDING SHORTFALL: (US\$ BILLION)	2005	2006	2007
Total grant approval capacity needed (per above)	2.3	3.5	3.6
Operating Expenses, less Interest <sup>(1)</sup>		0.1	0.1
Less: Funds available from prior year	-0.1		
<b>Total contributions needed</b>	<b>2.2</b>	<b>3.6</b>	<b>3.7</b>
Less: Pledged <sup>(2)</sup> to date (23 Feb 2005)	-1.3	-0.7	-0.4
<b>Additional pledges needed</b>	<b>\$bn 0.9</b>	<b>2.9</b>	<b>3.3</b>

*(1) Operating Expenses, less Interest Income: projected at \$30m to \$70m per year, depending on usage of promissory notes (increased usage would reduce the cash balance and hence reduce interest income). The 2005 amount rounds down to zero; the 2006 & 2007 amounts, assuming an increasing usage of promissory notes, round up to \$0.1bn. Operating Expenses comprise Local Fund Agent fees and Board, Technical Review Panel and Secretariat expenses.*

*(2) The 2005 pledge amount includes \$0.1 bn of 2004 pledges expected to be contributed in 2005.*

### 3.3 FORM AND TIMING OF CONTRIBUTIONS

**3.3.1 Funding Policy:** The Comprehensive Funding Policy (see Appendix 6.2) set by the Board of the Global Fund requires that the Board may approve proposals for grant funding in any year only up to the amount of the Fund's uncommitted assets, including pledges of amounts to be contributed in that calendar year. So far in the Global Fund's history, available resources have covered all proposals recommended by the TRP and subsequently approved by the Board. The policy further requires that, following Board approval and subsequent negotiation of the grant between the Secretariat and the grant recipient, a grant agreement can be signed only if an amount of assets sufficient to meet the full cost of implementation of the grant has been deposited with the Trustee in the form of cash or public promissory notes payable on demand. (See paragraph 3.3.4 for more information on promissory notes.) These assets are drawn down over the duration of the grant agreement (typically two to three years) to make periodic disbursements for the program in accordance with the needs and performance of the grantee.

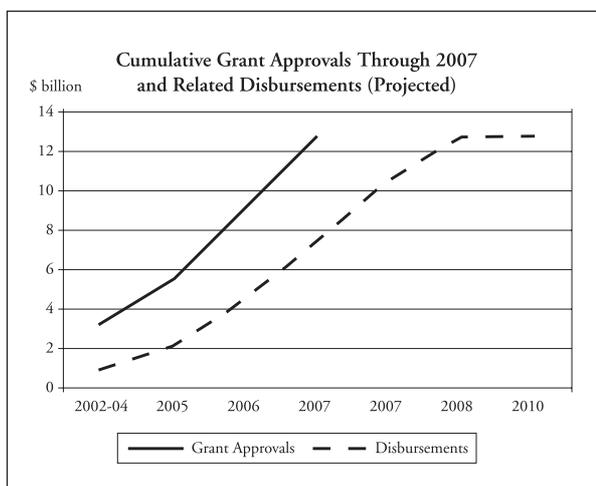
amounts contributed or pledged for contribution through the end of the calendar year in which grant approval occurs. Accordingly, any pledges taken into account in determining approval capacity in any year must be made good (in cash or promissory notes, as above) during that calendar year.

**3.3.3 Disbursement needs:** Because the Fund's grants are typically of two to three years' duration (two years for Phase 1 and three years for Phase 2), disbursement of the approved grant amount will occur over a number of years following approval of the grant. For example, grants for which approval capacity is required in 2006 and 2007 will be disbursed during 2006 through 2010. (Figure 1 below illustrates the time lag between the approval of grants from inception through 2007 and completion of their disbursement.)

<sup>3</sup> Proposals for grant funding include Phase 2 renewals.

**3.3.4 Promissory notes:** Recognizing the inherent delay between approval of a grant proposal and completion of the periodic disbursements of the grant amount, the Fund's policy allows for contributions to be made in the form of public demand promissory notes to be called for encashment on a time schedule that suits the Fund's disbursement needs. (However, to date, all except one donor have made their contributions in cash, with the result that the Fund currently holds sufficient assets to meet the entire undisbursed amount of all grants in Rounds 1–4.) A separate paper (*A Technical Note on Financial Management of the Global Fund*) outlines the Fund's disbursement needs and the encashment schedule envisaged for 2006 and 2007 contributions.

**FIGURE 1: TIME LAG BETWEEN GRANT APPROVAL AND COMPLETION OF DISBURSEMENT**



*'Grants Approvals' is the value of new grants, including Phase 2 renewals, approved by the Board of the Global Fund in each year. 'Disbursements' are the transfer in instalments of the approved grant amount from the Trustee to the grant recipient. Disbursements commence after approval of a grant proposal by the Board and the subsequent signing of a grant agreement, and are made at intervals throughout the duration of the grant agreement.*

**TABLE 4: GRANT COMMITMENTS THROUGH 2007 AND ARISING DISBURSEMENTS**

The tables here summarize the value of Phase 1 grant commitments projected to be approved through 2007, the subsequent Phase 2 decisions and the disbursements in each year arising from these commitments. No new rounds are assumed in this table beyond 2007.

1. 'Grants Approved' is the value of new grant commitments, including Phase II renewals, approved by the Board of the Global Fund in each year; this is disbursed over the duration of the grant commitment (usually two years for Phase I and three years for Phase II).
2. The table assumes that Round 5 grant commitments will be approved in 2005, Round 6 in 2006 and Rounds 7 & 8 in 2007. The total value of grants approved for Phase I of each round (the initial two years) is assumed to be \$1 billion for Round 5, \$1.1 billion for Round 6 and \$1.3 billion for each of Rounds 7 & 8. It is assumed that 85% by value of grants will be renewed for Phase II (usually years 3 to 5) and that renewal is approved twenty months after the first disbursement.
3. Disbursements commence after grant approval by the Board and subsequent negotiation of the grant agreements, and are made at intervals throughout the duration of the grant commitment. Hence, grant commitments approved through 2007, and the subsequent Phase II renewal of those grants, will be disbursed through 2012.
4. The tables include amounts for grants approved through 2007 and the subsequent Phase II renewals of those grants only. New rounds that may be approved after 2007 are not included. Hence the total amounts to be approved in 2008 and later years are expected to increase as a result of further new rounds (after Round 6). (Totals may appear not to add because of rounding.)

### 3.0 Resource Needs Based On Experience of the Global Fund Grant Cycle

GRANT ROUND	GRANTS APPROVED THROUGH 2007*						
US\$ million	2002-2004	2005	2006	2007	2008	2009	2010
<b>Phase I</b>							
Rounds 1 to 4	3,087						
Round 5		1,000					
Round 6			1,100				
Rounds 7 & 8				2,600			
<b>Phase II</b>							
Rounds 1 to 4	120	1,311	2,403	438			
Round 5				574	701		
Round 6 to 8					1,485	2,321	912
<b>Total (\$m)</b>	<b>3,207</b>	<b>2,311</b>	<b>3,503</b>	<b>3,612</b>	<b>2,187</b>	<b>2,321</b>	<b>912</b>
In Year (\$bn)	3.2	2.3	3.5	3.6	2.2	2.3	0.9
Cumulative (\$bn)	3.2	5.5	9.0	12.6	14.8	17.1	18.1

GRANT ROUND	DISBURSEMENT OF GRANTS APPROVED THROUGH 2007*								
US\$ million	2002-2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Phase I</b>									
Rounds 1 to 4	860	987	1,142	98					
Round 5		3	250	638	110				
Round 6			94	486	520				
Rounds 7 & 8				213	1,026	1,219	143		
<b>Phase II</b>									
Rounds 1 to 4		239	793	1,465	1,199	577			
Round 5				33	382	459	402		
Round 6 to 8					215	925	1,598	1,375	604
<b>Total (\$m)</b>	<b>860</b>	<b>1,229</b>	<b>2,279</b>	<b>2,931</b>	<b>3,452</b>	<b>3,179</b>	<b>2,143</b>	<b>1,375</b>	<b>604</b>
In Year (\$bn)	0.9	1.2	2.3	2.9	3.5	3.2	2.1	1.4	0.6
Cumulative (\$bn)	0.9	2.1	4.4	7.3	10.8	13.9	16.1	17.4	18.1

\* And subsequent Phase II renewals of those grants

Totals may appear not to add because of rounding

## 4.0 Global Resource Needs for Malaria, Tuberculosis and HIV/AIDS, 2005–2007

The Global Fund is part of a global effort to address the most devastating communicable diseases. Many diverse organizations both at the national and international level are involved in the implementation of vital activities that need sufficient resources to be effective. Calculations of global resource needs have to take into consideration the disease burden in affected countries, the effectiveness and cost of interventions, the capacity for implementation and the roles of the various partners. The following section provides detailed information on the best possible estimate of resources needed to achieve internationally agreed targets. It was developed in close collaboration with our partners in Roll Back Malaria, Stop TB, WHO and UNAIDS and is based on the latest information available concerning prices for commodities and services.

### 4.1 MALARIA

#### TEXT BOX 3: MALARIA GOALS AND TARGETS

##### **Roll Back Malaria Targets**

The Roll Back Malaria partnership supports achievement of the following goals:

- The Millennium Development Goal for malaria aims to halt and begin to reverse the incidence of malaria globally by 2015;
- More specifically, the Abuja Declaration against Malaria aims to halve malaria morbidity and mortality in Africa by 2010. Held in Nigeria in April 2000, the Abuja Summit on Roll Back Malaria produced the Declaration, signed by African heads of state, government officials and key partners including UNESCO, DFID, USAID, CIDA, the African Development Bank and the French Co-operation.

To achieve these goals, concrete targets have been set for 2005:

- At least 60% of those suffering from malaria should have access to treatment;
- At least 60% of those at risk for malaria should have suitable access to prevention methods such as bed nets;
- At least 60% of pregnant women should have access to intermittent preventive treatment.

WHO's Executive Board decided at its meeting in January 2005 to propose to the World Health Assembly to set targets of at least 80% coverage of major preventive and curative interventions for 2010.

## 4.0 Global Resource Needs for Malaria, Tuberculosis and HIV/AIDS, 2005–2007

**4.1.1** Malaria imposes a massive burden on the many nations in which it remains endemic. Malaria mortality exceeds one million annually, and many more episodes of clinical illness requiring anti-malarial therapy burden societies beyond the health system, affecting development and imposing a considerable economic burden on communities and institutions. Trends in current spending identify approximately US\$ 300 to 500 million in resources spent annually on malaria control at present. This level is far lower than will be required to meet international targets (as described above). Current coverage is considerably behind schedule, and massive efforts need to be implemented to achieve these concrete goals and, eventually, to meet the Millennium Development Goals. An accelerated roll-out of key interventions has been costed by Roll Back Malaria, including the provision of long-lasting insecticide treated nets (ITNs), indoor residual spraying (IRS), and the provision of treatment for those affected. The methodological approach from global perspectives is very briefly described in Appendix 6.4.

**4.1.2** Benefits of current investments in malaria are also evident, with increases in preventative efforts upfront eventually reducing the demand for treatment of severe malaria cases by at least 50%, thereby reducing long-term costs. A recent shift in strategy towards artemisinin-based combination therapies (ACTs) for treatment has significantly increased the total costs for malaria, but will also contribute to reducing the costs for severe malaria; in addition, the general application of insecticide-treated nets and other vector control methods, especially when combined with diagnostic testing, will reduce the need for ACTs.

**4.1.3** Essential infrastructure costs have been incorporated in this exercise, and include a basic set of equipment, supplies and training to ensure health services delivery effectiveness. Additionally, transportation, procurement and storage upgrades and program management costs were included to further develop health systems. However, additional facilities were not included in this estimate.

**4.1.4** Generally the resource needs for health professionals and health infrastructure are lower for malaria than for TB and AIDS. Malaria treatment usually does not need hospitalization and can be carried out by health workers at the dispensary or health center level and used at home with adequate support information. Traditionally, the dispensing of malaria drugs has happened to a large degree in the informal sector, with drugs being bought at kiosks by people self-diagnosing suspected malaria symptoms.

**4.1.5** The scale-up of ITNs does not require expensive and sophisticated infrastructure and highly trained staff; although a certain level of management with precise monitoring is required. The large-scale use of IRS requires a somewhat heavier organizational set-up with maintenance of a range of specific skills. Under all circumstances an expansion of current malaria activities to achieve more ambitious targets will require sustaining investment in procurement, transport and distribution infrastructure as well as a certain degree of retraining existing health professionals.

**4.1.6** As malaria goals are far from being met at present, especially in Africa, where the burden is the highest and significant commodity changes have taken place over the last few years, the figure presented here is likely to be an underestimate of actual costs required to ensure effective malaria control. The addition of new infrastructure such as clinics and storage for long-lasting insecticidal nets, and costs associated with expanded training for nurses and doctors, as well as the integration of malaria into reproductive health service delivery are all likely to push the costs for malaria control higher than current estimates.

**4.1.7 The malaria needs-based estimate presented here totals US\$ 2.9 billion per year worldwide.** Currently approximately US\$ 300 million is provided

by domestic sources. A description of the relative costs by intervention is presented in Table 5.

**TABLE 5: MALARIA RESOURCE NEEDS, 2007**

Specific interventions	No of Units in 2007	Cost per unit	Annual resource needs in US\$ millions <sup>4</sup>
Vector control in highly endemic areas (long-lasting insecticidal nets, LLINs) for vulnerable groups	31.5 million LLINs	US\$ 7 per LLIN procured and distributed to target population.	220
Artemisinin Combination Therapies	1102 million doses	Children <5 US\$ 0.6 per dose Children 5–15 US\$ 0.99 per dose Adults US\$ 1.7 per dose	1,180
Rapid Diagnostic Testing	776 million tests	Median cost is US\$ 0.7/ patient tested	543
Intermittent preventive treatment in pregnancy	39.7 million treatment courses	US\$ 0.164 per pregnant woman	6.5
Management of severe malaria cases	11.6 million cases	Median cost is US\$ 24/case	280
Prevention and control of epidemics	In all areas prone to malaria epidemics	US\$ 4,300 per equipment/training package	119
Basic infrastructure, institutions and transport	1 set per malarious province, 2–6 sets for central malaria program	US\$ 2,000 per package + vehicles (based on population at risk)	362
Training	Depending on intervention	Country-specific estimates	91
Community health workers, technical specialists	1 per 4,000 population 1–3 per country depending on population size	Country-specific incentives and support US\$ 50,000 salary for direct hires	58
Operational research, monitoring and evaluation	2–6 drug resistance studies per year, 2–6 insecticide resistance studies per year, routine surveillance — 5 staff and 15 visits	Country-specific estimates	28
		<b>TOTAL</b>	<b>US\$ 2.9 billion</b>

<sup>4</sup> Previous estimates have been circulated bearing lower malaria figures. They cited US\$ 2 billion as the estimated need for the 70 malarious countries where malaria burden is concentrated. The latest US\$ 3 billion estimate incorporates information from an expanded 82 countries, representing the entire scope of high-burden malaria endemic countries globally (46 in sub-Saharan Africa and 36 in Asia, Oceania and the Americas). The costing methodology or coverage targets have not changed. It needs to be emphasized that the items presented in the table are not meant to imply a selection of strategy, but rather illustrate the basis for the costing. Thus, for example, in many areas, LLINs will not necessarily be the preferred tool for vector control.

In January 2005, the Executive Board of the World Health Organization considered a global plan on achieving targets to achieve the MDGs. Based on the decision made during the Executive Board meeting to work towards clearly defined and more ambitious targets in order to accelerate the response to malaria, estimates of resource needs have been further specified and updated, as above. The Secretariat of the Roll Back Malaria Partnership has been working closely with its partners and technical experts to improve estimates of resource needs, which would fully support the targets set by the international community.

### TEXT BOX 4: TUBERCULOSIS TARGETS

#### **TB Targets**

The Stop TB Partnership and the Millennium Development Goals have defined a set of targets aimed at reducing the global tuberculosis burden:

- To detect 70% of new infectious TB cases by 2005;
- To cure at least 85% of all infectious cases treated by 2005 and;
- To halve TB mortality and prevalence and begin to reverse TB incidence by 2015.

## 4.2 TUBERCULOSIS

**4.2.1** Tuberculosis is a disease that caused 2 million deaths in 2003 and nearly 9 million cases, mostly in developing countries. Infecting one-third of the world's population, this curable disease damages households and national economies. The Stop TB Partnership developed the first Global Plan to Stop TB, 2001–2005, with four key objectives:

- To expand its current strategy — DOTS — so that all people with TB have access to effective diagnosis and treatment.
- To adapt this strategy to meet the emerging challenges of HIV and TB drug resistance.
- To improve existing tools by developing new diagnostics, new drugs and a new vaccine.
- To strengthen the Global Partnership to Stop TB so that proven TB-control strategies are effectively applied.

The Partnership has developed a resource needs package described in Table 6 identifying key components required to meet the targets described in Text Box 4.

**4.2.2** A key strategy aimed at reducing the tuberculosis burden is DOTS. The expansion of DOTS is an important part of the increasing resource needs for tuberculosis. Most tuberculosis control programs have been integrated into national health systems. Therefore the share of total TB control costs contributed by domestic resources is relatively high. Tuberculosis control requires well-managed and monitored operations which in turn require a fairly high degree of health infrastructure including first-level and reference laboratories, well-organized drug supply, health clinics for outpatient care and, sometimes, hospitals for the initiation of treatment. Increasing the detection and cure rates to achieve the targets will need further investments in health professionals, logistics and infrastructure.

**4.2.3** Additionally, two serious challenges affect the cost estimates for tuberculosis: the HIV/AIDS epidemic, and the problem of multidrug-resistant tuberculosis (MDR-TB). While the relationship between HIV/AIDS and tuberculosis is well known, information on the costs of the joint TB and HIV/AIDS activities needed to address both epidemics is limited. Work is currently underway to more precisely estimate the needs of such activities, as part of the development of a second Global Plan to Stop TB that will cover the period 2006–2015. It will be important to avoid duplication in costing of interventions related to both TB and HIV/AIDS, notably of antiretroviral treatment for TB patients.

Specific interventions are identified in Table 6 and sum to provide the disease specific estimate of approximately US\$ 2.0 billion per annum. WHO estimates US\$ 1.2 billion is provided by domestic sources, representing 58% of projected cost estimates (including World Bank loans and credits).

**TABLE 6: TUBERCULOSIS RESOURCE NEEDS, 2006–2007**

Area	Specific interventions	Annual resource needs in US\$ millions (minimum*)
DOTS expansion	High burden country needs	1,425
	TB care in other countries	288
	Technical assistance and coordination	47
Adapting & improving DOTS	TB/HIV	129
	Multidrug-resistant TB	91
		<b>US\$ 2.0 billion</b>

\* Estimates are minimums because it is expected that TB/HIV collaborative activities and treatment for MDR-TB will be scaled up in 2006 and 2007 from currently low levels, and because of further expansion of DOTS. (Totals may appear not to add because of rounding)

**4.2.4** However, US\$ 2.0 billion may still be insufficient. Experience in scaling up DOTS coverage in the last few years suggests an increase in spending from US\$ 860 million to US\$ 1,320 million (a 50% increase) in the 22 high-burden countries (HBCs) to increase coverage from approximately 37% in 2002 to a projected 60% in 2005. Reaching the 70% case detection target set by the World Health Assembly and the Stop TB Partnership will require additional funds. For countries such as India, China and Indonesia, the costs of reaching the 70% case detection target are accounted for in the estimates presented, but for several countries, especially in Africa, additional financing will be required to meet this target. In addition, there is likely to be a substantial increase in the resources needed for HIV/TB and MDR-TB, to enable scaling up of activities and interventions from their currently low level.

### 4.3 HIV/AIDS

**4.3.1** Three major exercises to assess global needs for HIV/AIDS have been conducted since 2001. In preparation for the UN General Assembly Special Session on HIV/AIDS in 2001, a first comprehensive analysis was undertaken to provide an estimate of resource needs for HIV/AIDS (Schwartlander et al., 2001). This work included interventions for prevention, treatment, care and support and resulted in annual

needs for low- and middle-income countries of US\$ 9.2 billion in 2005. An update to this was presented in 2002 to the UNAIDS Programme Coordinating Board which expanded the time frame to 2007 and — including costs associated with occupational post-exposure prophylaxis and medical injection safety — estimated a total annual requirement from all sources of US\$ 10.5 billion by 2005 and US\$ 15.2 billion by 2007.

**4.3.2** UNAIDS is currently in the process of preparing new estimates on global resource needs for an expanded response to AIDS in low- and middle-income countries. These estimates will be released at a High Level Meeting in London on March 9 jointly organized by UNAIDS and the governments of the United Kingdom, France and the United States called “Making the Money Work: The ‘The Three Ones’ in Action”. The UNAIDS document will be made available to the participants of the Global Fund replenishment before its first meeting in Stockholm March 14–16. Preliminary information indicates that UNAIDS will propose a medium option for meeting global HIV/AIDS resource needs in the range of US\$ 13.5–15.5 billion required annually by 2007.

**4.3.3** The estimates of resource needs assume a global package of interventions with specific outcomes for each of these. The way these are implemented over

time will depend on country priorities and capacity. While overall global expected outcomes may give a good indication of how many people will be reached with each intervention over the coming years, the growth in global coverage will depend on how countries will define their scale-up packages.

**4.3.4** The Global Fund estimate presented in this paper will use the midpoint of the range — defined as US\$ 14.5 billion — for its calculation of the Global Fund share of the total future resource needs.

**4.3.5** These resources would make attainable 71% of comprehensive prevention coverage targets by 2007. This would include prevention programs aimed at the general population, e.g. mass media and voluntary counseling and testing; high-risk groups, e.g. school-based education, out-of-school youth, sex workers, men who have sex with men and specific service delivery programs, e.g. provision of condoms, sexually transmitted infections management, mother-to-child transmission, blood safety, post-exposure prophylaxis.

**4.3.6** This option would also provide sufficient resources for a considerable scaling-up of access to treatment, care and support including palliative care, diagnostic testing, treatment and prophylaxis for opportunistic infections, antiretroviral therapy (ART) and laboratory monitoring for ART<sup>5</sup>.

**4.3.7** The contribution of resources from domestic sources, both public and private, has increased considerably over the last few years, particularly after the UN General Assembly Special Session on HIV/AIDS in 2001. There is a much higher level of political awareness and commitment in most affected countries. It is estimated that domestic spending (including out-of-pocket payments) will reach approximately US\$ 3 billion in 2007, leaving US\$ 11.5 billion to be found from international cooperation.

**4.3.8** Some support for orphans and vulnerable children is included in this calculation although clearly more is required to address the devastating conse-

quences of HIV/AIDS for this particularly vulnerable group.

### 4.4 THE ROLE OF DOMESTIC AND EXTERNAL SOURCES TO COVER TOTAL RESOURCE NEEDS

**4.4.1** Domestic resources are critically important in the fight against these diseases. However, in resource-poor settings, limitations exist to leveraging sufficient national resources for health. The Abuja targets agreed by African heads of state in April 2001 ambitiously aim to increase percentage GDP spending on health from an average of 5% at present to 15% in all African countries. However, only a few countries have achieved these targets. Analysis shows that increases in domestic budgets are possible, but elasticity in the poorest nations, most of them in Africa, is limited. These are also, unfortunately, the countries with the highest burden of disease. Country spending on health decreases with decreasing GDP and in the poorest of nations, health spending is already very low. Competing health needs and infrastructure demands are likely to use most of what is made available.

**4.4.2** Out-of-pocket payments are included to some extent in these estimates. However, these are often incurred for catastrophic health expenditures, especially in the poorest countries with a high burden of the disease, and must not be considered disposable means for many of those living in the most impoverished of nations. Great variability exists in the ability to leverage out-of-pocket financing: in Latin America an average of 11% of total health costs are mobilized from this source, but for other regions, it is typically less.

**4.4.3** Basic commodities for all three diseases remain comparatively expensive and beyond the financial reach of developing country government budgets. Malaria remains largely funded by international sources, particularly for bednets and ACTs. As programs scale up, future funding will need to be increasingly mobilized from international resources.

<sup>5</sup> The target for treatment, care and support is still under consideration by UNAIDS and WHO and will be released for a meeting on March 9 in London.

**4.4.4.** Limitations exist in estimating domestic resources allocated to the three diseases and it has been proposed that the estimates included here may well be on the low side, in particular in the case of malaria. Work is ongoing with technical partners to improve methodologies for measurement and their implementation. However, even if domestic resource contributions are underestimated, they are unlikely to have an impact on resource needs from international sources as such differences are likely to be limited (in the cases of TB and HIV), and have not been included in the estimates for malaria which represent additional needs.

**4.4.5.** The external share of the total resource needs to be provided by international donors is the result of domestic contributions deducted from the total resource needs. Based on this calculation a total of US\$ 14.9 billion would be requested from international donors to cover the needs for AIDS, TB and malaria by the year 2007.

**TABLE 7: ESTIMATED COSTS FOR 2007 FOR THE THREE DISEASES (US\$ BILLIONS)**

	<b>Malaria</b>	<b>TB</b>	<b>HIV</b>	<b>Total</b>
Resource needs	2.9	2.0	14.5	19.4
Total domestic expenditure	0.3	1.2	3.0	4.5
<b>Total international share</b>	2.6	0.8	11.5	14.9

1. बाह्य कक्ष  
2. माइक्रोस्कोपी  
लैब  
3. दवाई वित्त  
कक्ष  
4. एक्स  
क



## 5.0 The Global Fund's Share of Global Need

**5.1** The Global Fund needs sufficient resources to fulfill its mandate as part of a global architecture developed to address specific disease problems. The Global Fund receives the majority of its funding from governments around the world who at the same time support all other instruments of development assistance in bilateral and multilateral organizations. The Global Fund values the contributions of all these partners and tries to complement (and by no means replace) their efforts. It constantly has to demonstrate the added value justifying the resource flow through this specific mechanism.

**5.2** When the Global Fund was created in 2001, the intention was to design a new financing mechanism that would have characteristics differentiating it from other existing mechanisms. Experts from recipient and donor countries, multilateral organizations, civil society and the private sector developed the design of this instrument as particularly suitable for the specific demands of a rapid and effective response to the three major communicable diseases.

These specific characteristics include:

- Eligibility criteria that would allow all low- and lower-middle-income countries and a small number of upper-middle-income countries (World Bank definition) to apply to the Global Fund. This policy has led to a very broad reach with programs supported in 127 countries and two territories, including many countries not supported by bilateral or other multilateral organizations.
- The inclusion of civil society and the private sector at all levels of Global Fund operations. It was recognized that only the full participation of all partners could lead to an effective and sustainable implementation of vital programs.
- A very lean organization with minimal overhead costs to maximize the resources flowing to the programs. For 2004, only 3% of program costs were required for the maintenance of the secretariat in Geneva.
- An innovative oversight mechanism involving country-based auditing firms ensuring accountability without direct country presence.

- The implementation of performance-based funding linking disbursements to the achievement of clear, measurable and verifiable targets.

**5.3** The combination of these characteristics makes the Global Fund a suitable instrument for particular programs and interventions while the very nature of its structure also determines that it will always depend on collaboration with national and international partners. These factors must be kept in mind when determining the Global Fund's appropriate share of international contributions to fight the three diseases.

**5.4** Already the Global Fund is a key part of the international funding architecture. It is the leading channel for international resources in both malaria and tuberculosis control, contributing approximately 45% and 66% of all international funding respectively. Additionally, the Global Fund is a major conduit for support to HIV/AIDS programs worldwide. While a lack of comparable data among all major donors makes it difficult to estimate the true proportionate contribution of the Global Fund to HIV/AIDS activities, this is conservatively estimated at approximately 20%.

**5.5 Malaria** has long been neglected by international donors. Even a relatively cheap and basic technology such as mosquito nets has not received significant support through external funding. The Global Fund was the first major financing mechanism to help countries shift from the old, inexpensive but also increasingly ineffective first-line treatment with Chloroquine to the highly effective artemisinin products. It has shown considerable flexibility and speed in reacting to a changing environment requiring reprogramming of resources according to international treatment recommendations.

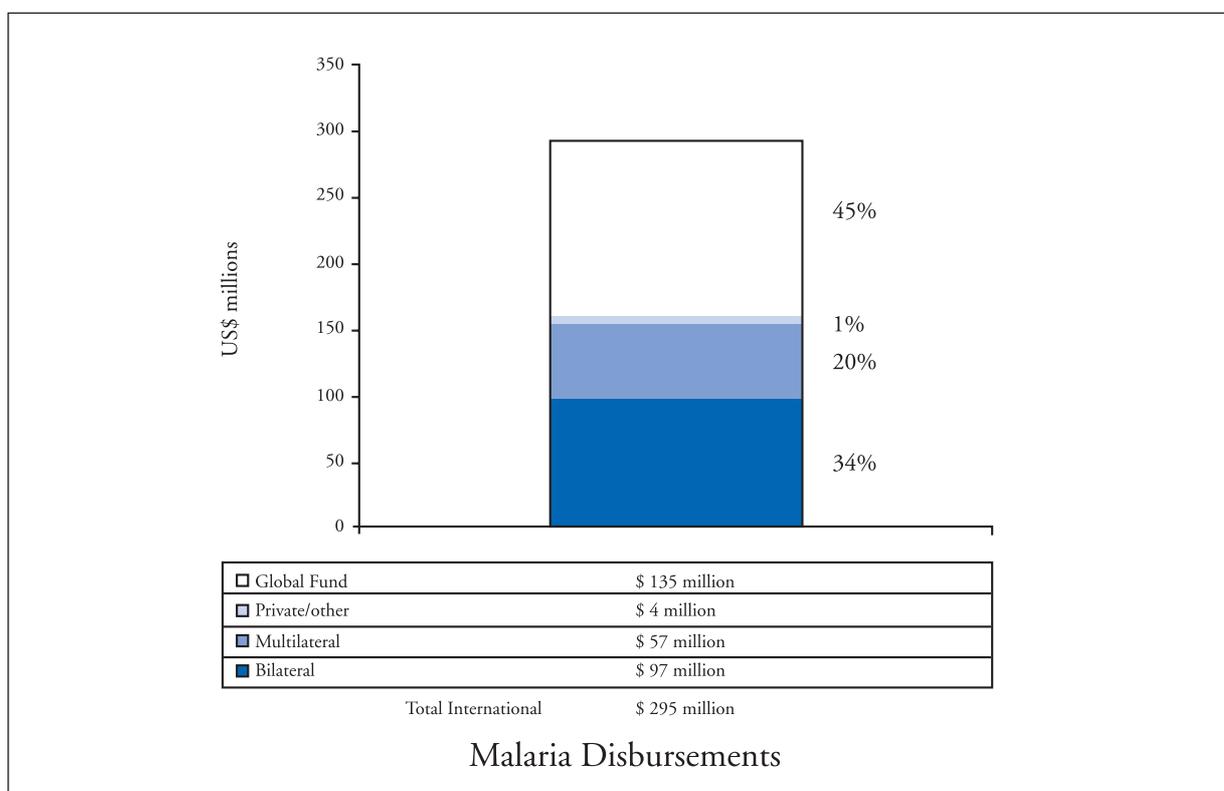
**5.6** Other major donors addressing malaria include the World Bank, which over the five-year period 2000 to 2004 has committed US\$ 100–150 million to malaria activities, and UNICEF, which has provided wide-scale logistical and financial support for the procurement of ITNs. But as the Global Fund has become a major donor for malaria, other donors have become

## 5.0 The Global Fund's Share of Global Need

less inclined to expand their services, in order to avoid duplication. Therefore the Global Fund appears to be the most important instrument to roll back malaria in endemic areas, spending US\$ 135 million (45%) in 2004 as part of total international funding for malaria

in the order of US\$ 295 million. This is reflected in Figure 2. The limited growth potential of other partners in funding malaria predicts a larger role for the Global Fund in the fight against malaria.

**FIGURE 2: GLOBAL FUND DISBURSEMENTS TO MALARIA (US\$ MILLIONS), 2004**

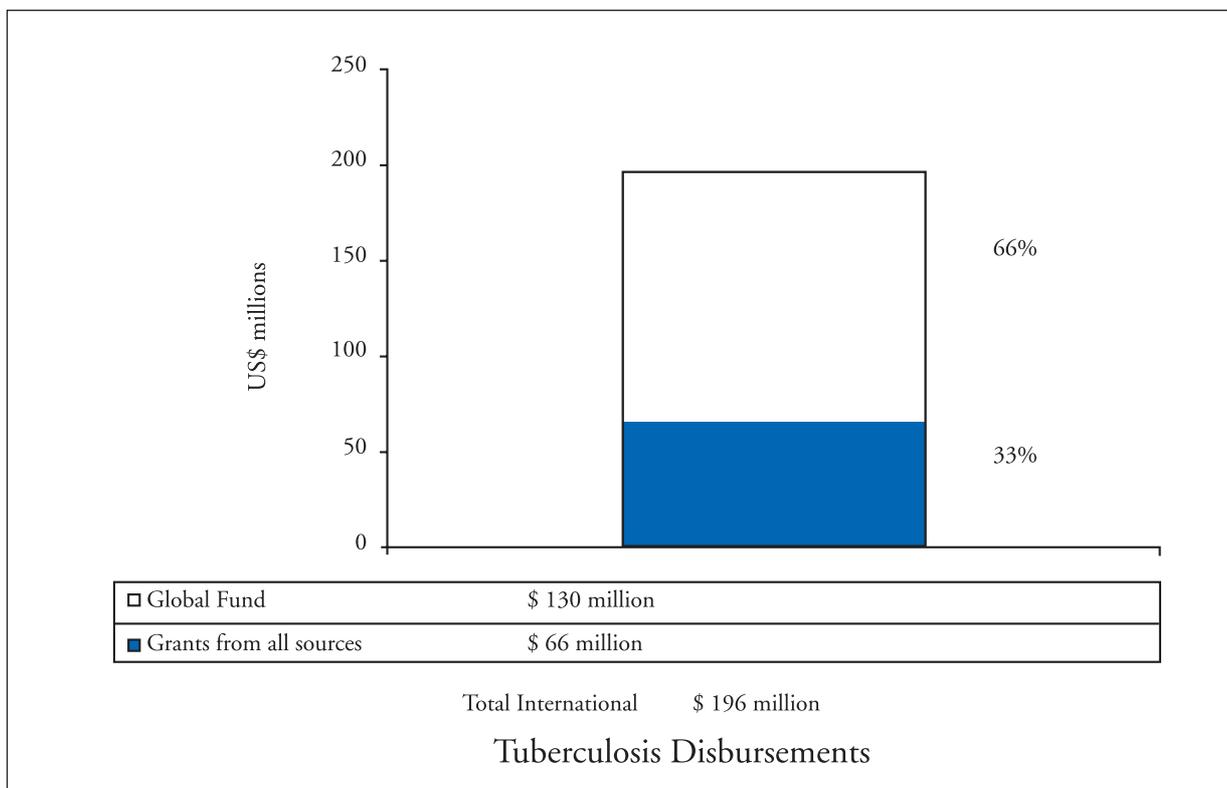


*(Totals may appear not to add because of rounding)*

**5.7** For **tuberculosis**, bilateral and multilateral support have historically been a relatively small part of the funding picture, although critical for DOTS scale-up in the last few years, and domestic resources have dominated. WHO estimates that domestic spending in 2005 was at approximately 58% of projected costs (including World Bank loans and credits). International resources have taken the form of donor support principally from DFID, CIDA, USAID and the Japanese, Dutch and Italian governments. The Fund has presented an additional injection of funds to facilitate TB control efforts providing 66% of estimated commitments in 2005 as part of total external funding reported for tuberculosis (Figure 3).

**5.8** For **HIV/AIDS**, apart from the Global Fund, reliable data on disbursement levels are not captured consistently in the international domain. Typically, data made available is in the form of commitments, and as a result, comparing Global Fund disbursements to this, as conducted for the other diseases, does not truly reflect the Fund's contribution to mitigating the impact of HIV/AIDS epidemics worldwide. Other multilateral donors, including the co-sponsors of UNAIDS, in particular the World Bank, collectively committed approximately US\$ 1 billion in 2004. The United States PEPFAR initiative (US President's Emergency Plan for AIDS Relief) launched in 2003 has provided major financial resources committing approximately US\$ 2 billion in bilateral funding for

**FIGURE 3: GLOBAL FUND AND OTHER EXTERNAL COMMITMENTS TO TUBERCULOSIS<sup>6</sup> (US\$ MILLIONS), 2005**



<sup>6</sup> These data represent the most recent estimates from a subset of 59 countries reporting to WHO. Differences may occur due to variations in budget cycles. These data are intended to display the relative distributions of international funding between the Global Fund and all other grants made to countries.

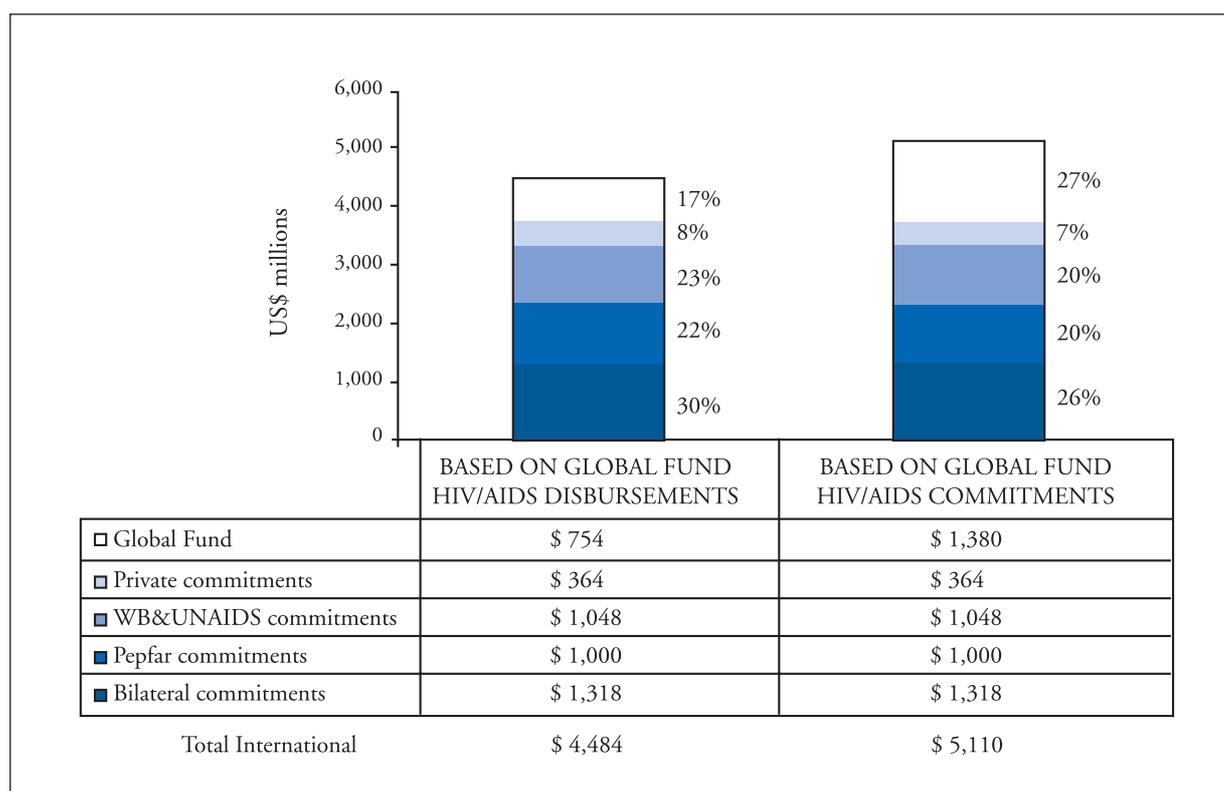
## 5.0 The Global Fund's Share of Global Need

both 2005 and 2006. It concentrates on 15 countries with the highest disease burden (12 in Africa, 1 in Asia and 2 in Latin America/Caribbean). PEPFAR is supporting prevention, care and treatment and will cover an important part of the scale-up in ARV treatment. Other bilateral agencies have also announced increasing commitment so that the overall resources from bilateral sources are likely to grow further.

**5.9** The lack of comparable data necessitates two approaches to understanding the Global Fund's share of international spending for HIV/AIDS: the first, comparing Global Fund disbursements with the commitments of other international donors, and the second, comparing Global Fund commitments with the commitment levels of others. As shown in Figure 4, the percentage for the Global Fund share of all international funding falls between 17% (using the Global Fund's disbursement figures) and 27% (assuming the

Fund's commitment figures). It is clear that 17% is an underestimate of the true Global Fund share, as commitments for other donors systematically overestimate disbursement levels. The 27% shown as a proportion of all international commitments is certainly a better reflection of the true share, but it may be somewhat of an overestimate given the cautious Comprehensive Funding Policy of the Global Fund. The "true" value of the current Global Fund share of international resources will likely lie between these two values and a value of 20% is therefore taken as a conservative best estimate.

**FIGURE 4: GLOBAL FUND DISBURSEMENTS AND COMMITMENTS TO HIV/AIDS (US\$ MILLIONS), 2005**



**5.10** Assuming the relative donor contributions for each disease remain constant at current levels, the Global Fund share of global disbursements for all three diseases would be in the order of US\$ 3.6 billion in 2006 and US\$ 4.0 billion in 2007.

**TABLE 8: ESTIMATES OF GLOBAL FUND RESOURCES REQUIRED IN 2006 AND 2007 TO REACH INTERNATIONALLY AGREED TARGETS (US\$ BILLION), BASED ON CURRENT SHARES OF THE GLOBAL FUND**

		MALARIA	TB	HIV	TOTAL
<b>2006</b>	<b>Total estimate (needs based)</b>	<b>2.8</b>	<b>2.0</b>	<b>12.9</b>	<b>17.7</b>
	Projected domestic resources	0.3	1.2	2.8	4.3
	International resources required	2.5	0.8	10.1	13.4
<b>2007</b>	<b>Total estimate (needs based)</b>	<b>2.9</b>	<b>2.0</b>	<b>14.5</b>	<b>19.4</b>
	Projected domestic resources	0.3	1.2	3.0	4.5
	International resources required	2.6	0.8	11.5	14.9
<b>Global Fund contribution to international resources</b>		<b>45%</b>	<b>66%</b>	<b>20%</b>	<b>27%</b>
<b>Projected Global Fund resources, 2006</b>		<b>1.1</b>	<b>0.5</b>	<b>2.0</b>	<b>3.6</b>
<b>Projected Global Fund resources, 2007</b>		<b>1.2</b>	<b>0.5</b>	<b>2.3</b>	<b>4.0</b>

**5.11** For the purpose of informing the replenishment process, this document has described the validation of the Global Fund's estimates of its own needs — the bottom-up approach — through complementary estimates of the Global Fund's appropriate share of global need calculated by our partners. Other validations have also been shown: that the value of funding proposals can be taken as a current approximation of the resource gaps in countries submitting proposals, and that due to the diligence of the Global Fund grant application review process, the value of rounds of proposals can be taken as an approximation of absorptive or distributive capacity in eligible countries. The mandate of the Global Fund thus remains clear — to manage and disburse resources attracted in response to stated need. To fulfill only the moderate estimates of need detailed herein will require US\$ 3.5 billion for 2006 and US\$ 3.6 billion for 2007, based on the Global

Fund's continuing business model, corroborated by estimates of appropriate share. Nevertheless, in considering the needs of the Global Fund, it is important to bear in mind a larger perspective. The Global Fund is only part of a global effort to build and support a sustainable financial framework that effectively fuels progress towards achievement of the Millennium Development Goals. The Global Fund can only succeed in making a significant contribution to achieving these goals if its partners are also supported in their needs.



## 6.0 Beyond 2007

**6.1** While it is difficult to paint an accurate picture beyond 2007, it is clear that costs for the three diseases will continue to increase before the spread of the epidemics can be reversed and future costs averted. All three diseases will face increasing treatment costs with the scale-up of more effective medication such as ACT for malaria, costly treatment for multi-drug resistant TB or for lifelong treatment with ARVs for an increasing number of people living with HIV/TB who will become symptomatic. Expenditure for prevention and mitigation of the socio-economic consequences, including care for orphans and vulnerable children, is also going to increase considerably.

**6.2** This paper has provided an estimate of the Global Fund share of global external resources based on the current average funding share of the Global Fund (45% for malaria, 66% for TB and 20% for HIV/AIDS). Most Global Fund grants, however, are not even 12 months old and only three years after the creation of the Fund it might well be premature to assume that this share of global funding will continue to be the most effective response to the three epidemics.

**6.3** Assessing the Global Fund's appropriate future share of resources needed to address the three epidemics is clearly dependent on its performance as a financing mechanism and the subsequent achievement of results at country level. Provided that there is sufficient trust in the Global Fund among its key stakeholders in recipient countries, among donors, and with civil society and the private sector, a consensus could emerge for the Global Fund to play a greater part in closing the resource gap for all diseases beyond 2007. The appropriate level of funding would have to be determined in the next replenishment period but could be as high as US\$ 7-8 billion annually, depending on the performance of, and the trust in, the Global Fund.

**6.4** Nevertheless, whatever its future level of income and expenditure, the Global Fund must remain an organization able to learn and to adapt to challenges in order to fulfill its mandate as part of the global fight against the three major infectious diseases.

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## 7.1 THE MILLENNIUM DEVELOPMENT GOALS

The Millennium Development Goals commit the international community to an expanded vision of development, one that vigorously promotes human development as the key to sustaining social and economic progress in all countries, and recognizes the importance of creating a global partnership for development. The goals, set for 2015, have been commonly accepted as a framework for measuring development progress and are headlined as follows:

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- By 2015, to have halted and begun to reverse the spread of HIV/AIDS and the incidence of malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development.

## 7.2 COMPREHENSIVE FUNDING POLICY<sup>7</sup>

The Comprehensive Funding Policy of the Global Fund demands that the board of the Global Fund can only approve grants if the full amount required for the first two years is covered by pledges from donors in the calendar year of the approval. A grant based on the approved amount can only be signed by the secretariat if the full amount of resources for the initial two-year period is covered by cash or promissory notes in the Trustee account. Approvals of renewals for Phase 2, usually covering the years three to five of a grant, have to be covered by pledges from donors in the calendar year of the approval, and subsequent Phase 2 grant extension signings again have to be covered by cash or promissory notes. Hence the policy requires the Global Fund to have a relatively high level of assets in the Trustee account, in the form of either cash or demand promissory notes.

## The Global Fund's Comprehensive Funding Policy has the following features:

1. Resource-mobilization should use a periodic replenishment model on a voluntary basis for all public donors, complemented by additional ad hoc contributions for all donors, including new public donors, the private sector, and individuals.
2. TRP-recommended proposals should be approved up to the total of resources available.
3. Proposals are approved for the entire term of the proposal (up to five years) with a financial commitment for the initial two years with the possibility of renewal for up to an additional three years, with the following conditions:
  - The Board may approve proposals and commit funds for two years up to the cumulative uncommitted amount pledged through the calendar year of the Board decision;
  - A sufficient amount of assets to meet the full cost of two years of implementation of approved grants must be deposited with the Trustee or be readily available on demand prior to the Secretariat signing a grant agreement;
  - Based on successful implementation of a grant, funding beyond its first two years receives priority over the funding of new proposals;
  - No funds for appeals should be reserved. Successful appeals should be funded immediately if resources are available or as soon as new resources become available.
4. Both cash and demand public promissory notes should be considered as assets.
5. The Board will announce a minimum of one Call for Proposals per calendar year. The Board can adjust this based on need and on resources available. A forecast of the resources available for the Round will be announced at the time that the Call for Proposals is issued.

<sup>7</sup> Approved by the Global Fund Board (6th meeting, Chiang Mai, Thailand, 15–17 October 2003).

Paragraph 8 was amended slightly by Board decision at its 7th meeting, Geneva, Switzerland, 18–19 March 2004. This policy is under review.

6. At the final Board meeting of each year, beginning with the 2004 budget, the Global Fund will forecast resources and estimate demand for the next year. This estimate will show clearly the funds available for commitment. This estimate should be attached to the annual budget. This estimate should be updated at each Board meeting.

7. Technical merit will be the criteria used to determine proposal approval. The Technical Review Panel

should refine its recommendations in category 2 in a way that will facilitate the Board's prioritization of proposals for approval.

8. If it is necessary to further prioritize within these sub-categories, the following additional criteria will be used by the Board: poverty, disease burden, and other criteria which the Board deems appropriate.

9. The Board will not partially approve components.

### 7.3 MALARIA METHODOLOGY

#### Methodology

WHO has recently conducted an analysis on estimated costs for combating malaria and meeting set targets. The analysis generates annualized costs for the treatment and control of malaria based on unit costs for the disease in ten areas. These activities are intended to represent those interventions most likely to be broadly implemented and include:

1. Providing long-lasting insecticidal nets (LLINs) free to high-risk population groups, with replacement after four years of use; or other locally relevant vector control;
2. Introducing artemisinin-based combination therapies (ACTs) in all areas with significant *Plasmodium falciparum* transmission, and rapid diagnostic testing (RDTs) in areas where transmission is less intense, and in all areas for persons more than five years old;
3. Distributing Sulfadoxine-Pyrimethamine (SP)-based intermittent preventive therapy (IPT) to pregnant women exposed to malaria in areas of moderate to intense transmission where parasites remain sufficiently sensitive to SP;
4. Ensuring the availability of adequate supplies of specific therapies and general clinical support to treat cases of severe and complicated malaria;
5. Improving epidemic prevention and response capabilities including enhanced surveillance systems and indoor residual spraying (IRS) to prevent and curb epidemics;
6. Supporting particular elements of the health infrastructure that are critical for the efficient implementation of scaled-up antimalaria efforts;
7. Training community health workers and existing health facility staff in new treatment protocols and diagnostics, delivery of prevention; supervision, management and operational research;
8. Producing and distributing community-directed strategic communications that reinforce knowledge of malaria prevention, early recognition of symptoms, and the need to seek treatment promptly;
9. Reducing critical gaps in human resources, including health professionals, epidemiologists, entomologists and other relevant technical fields;
10. Monitoring and evaluation, including the set-up and use of health information systems.

The assessment was based on assuming increasing coverage levels consistent with meeting the Abuja targets and the Millennium Development Goals by 2015 (95% coverage of people at risk with essential interventions expected). For 2005–2007 these are:

		2005	2006	2007
<b>Vector Control (ITN or IRS)</b>	New	20%	20%	20%
	Replace	0%	0%	0%
	Coverage	20%	40%	60%
<b>Intermittent Preventive Treatment</b>	Coverage	30%	60%	70%
<b>ACT (1st Line)</b>	Coverage	30%	60%	65%
<b>Severe &amp; Complicated (2nd Line)</b>	Coverage	100%	100%	100%
<b>Rapid Diagnostic Testing</b>	Coverage	Areas w/ multiple causes of fever	100%	100%
<b>Epidemic Surveillance &amp; Prevention</b>	Coverage	100%	100%	100%
<b>Infrastructure &amp; Institutions</b>	Coverage	100%		
<b>Training /IEC</b>	Coverage	100%		
<b>Community Health Workers</b>	Need	20%	20%	20%
<b>Operational Research</b>	Coverage	100%	100%	100%
<b>Monitoring &amp; Evaluation</b>	Coverage	100%	100%	100%

Seventy malarious countries were included in this analysis, selected based on the total population risk to *Plasmodium Falciparum* malaria. This focus was considered suitable for identifying financial needs. Notable omissions needing further work include India and Brazil. Annual population growth rates were applied to the estimates to represent growing country needs.

Commodity and distribution prices were derived primarily from RBM/WHO internal surveys; where choice was available, neither the most nor the least expensive options were chosen. Training and community education costs were derived from median values extracted from itemized budgets in proposals to the Global Fund, except for training costs for health professionals and certain other costs which were derived from local information.

ACTs present a new increased addition to malaria costing efforts, as do long-lasting ITNs. Potential increases in the prices of commodities such as insecticides may be problematic and add to existing costs.

Of particular interest is the costing of health infrastructure and institutional capacity. These costs are intended to support current programmatic interventions, and include equipment and trained personnel required to provide a basic level of health services, a basic set of equipment and transportation, as well as program management, including monitoring and evaluation systems. These are considered basic struc-

tural demands to strengthen existing services, and boost limited scale-up efforts and are likely to present underestimates of infrastructure demands should massive scale-up efforts be required. This may, for example, include additional health care infrastructure and broad-based training of medical personnel.

The model does present some benefits to ramping up coverage levels in preventative efforts. These will eventually reduce the demand for first-line therapies by as much as 50% thereby reducing long-term costs, but these benefits are not likely to be seen before 2010.

## 7.4 TUBERCULOSIS METHODOLOGY

**Methodology**

Stop TB has presented cost estimates for global TB control for 2001–2005 as part of the Global Plan to Stop TB. The countries included in the estimates were the 22 high-burden countries (HBCs) that account for 80% of estimated global TB cases, plus all low- and lower-middle-income countries outside the 22 HBCs. The following four areas are considered in the cost assessment:

1. DOTS expansion, including high-burden country needs and TB care in other countries.
2. Adapting and improving DOTS, including limited country needs for TB/HIV and MDR–TB interventions.
3. Research and development tools including costing for new diagnostics, new drugs and new vaccines.
4. Partnership costs. These amount to approximately US\$ 10 million and will not be covered by the Fund.

The estimated need for five years was US\$ 9.1 billion, or an average of US\$ 1.8 billion per year. The funding gap was estimated as US\$ 3.8 billion over five years, equivalent to US\$ 0.8 billion per year on average (excluding research & development costs). An update of these estimates was made in 2004, which estimated annual needs of US\$ 2.2 billion in both 2004 and 2005 (the funding gap estimate was not updated). Commitments in 2005 derive from WHO Member State reporting to WHO on sources and volume of financing.

DOTS expansion is by far the largest cost component in the estimates, accounting for over US\$ 1.7 billion per year. Costs for DOTS expansion were based on country-specific analyses, and included costs specific to TB control (e.g. drugs, national TB program staff, laboratory supplies), the costs associ-

ated with using general health services staff and infrastructure during outpatient visits and hospital admissions, and technical assistance. Sources of cost data included national plans, costing studies and questionnaires. For countries for which data were not available, costs were extrapolated from countries with a similar TB burden and income level. The number of cases to be treated was based on epidemiological data, demographic projections, and assumptions about the rate of progress towards achieving the 70% case detection target. The total costs presented in the Global Plan conceal important variations among countries in total financial needs, sources of funding and funding gaps.

The costs associated with interventions to address the problem of TB/HIV co-infection and Multidrug-Resistant TB (MDR-TB) were based on more limited data. The interventions covered by the TB/HIV cost estimates were isoniazid preventive therapy, HIV testing and counseling, and screening for TB among people infected with HIV. Following the publication of the WHO interim policy on TB/HIV collaborative activities in 2004, the second Global Plan to Stop TB will cost a wider range of activities and interventions. Using conservative assumptions about incidence and the proportion of MDR-TB cases likely to be detected, the analysis for MDR-TB relied on data from Peru on MDR-TB, and applied these costs to other countries with MDR-TB cases.

