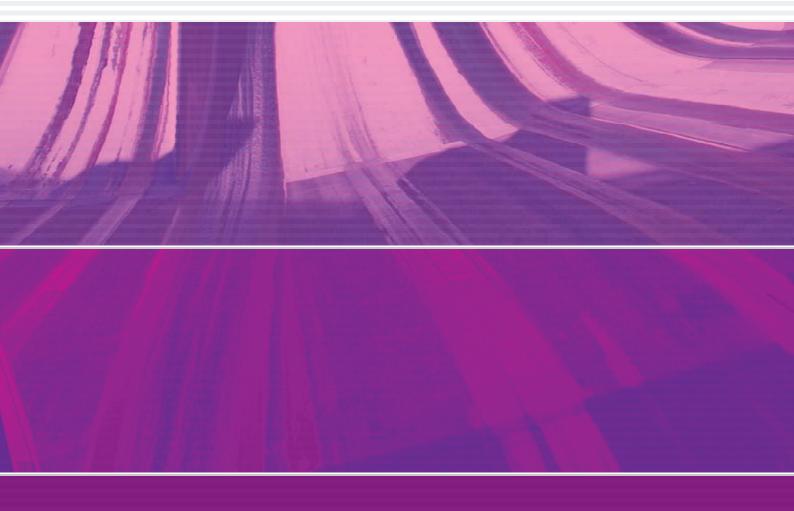
THE GLOBAL FUND TO FIGHT AIDS, TUBERCULOSIS AND MALARIA THIRD REPLENISHMENT (2011-2013)

INVESTMENTS IN THE HEALTH OF WOMEN AND CHILDREN:

GLOBAL FUND SUPPORT OF MILLENNIUM DEVELOPMENT GOALS 4 AND 5





LIST OF ABBREVIATIONS

ACT artemisinin-based combination therapy

ARV antiretroviral

PMTCT prevention of mother-to-child transmission (of HIV)

TB tuberculosis

UNAIDS Joint United Nations Programme on HIV/AIDS

UNFPA United Nations Population Fund UNICEF United Nations Children's Fund

WHO World Health Organization

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EXECUTIVE SUMMARY

1. MILLENNIUM DEVELOPMENT GOALS 4, 5 AND 6 ARE INTERLINKED.

- 1 Directly and indirectly, HIV, tuberculosis (TB) and malaria severely affect the health of women and children:
 - Together, HIV, TB and malaria directly cause 1.1 million deaths a year among women aged 15 to 59 and 1.2 million deaths among children aged 0 to 4.
 - Among women of childbearing age (defined as between 15 and 44), HIV is the leading cause of death. In sub-Saharan Africa, HIV is responsible for 46 percent of all deaths among women in this age group.
 - Malaria directly causes 17 percent of deaths among children aged 0 to 4.
 - HIV, TB and malaria are also among the most common *indirect* causes of maternal deaths. For example, maternal mortality in HIV-positive women is much higher than in HIV-negative women.
 - In 2008, 15.7 million women and 2.1 million children under 15 years old were living with HIV, and an estimated 430,000 children newly contracted HIV.
 - HIV prevention and care are core elements of sexual and reproductive health, and gender inequities are a common underlying barrier to improving women's health.
 - Around 38 percent of incident TB cases in 2008 occurred among women, and women bear a relatively higher burden of TB in countries where HIV prevalence is high.

2. GLOBAL FUND INVESTMENTS TO COMBAT HIV, TUBERCULOSIS AND MALARIA MAKE A SUBSTANTIAL CONTRIBUTION TOWARDS REACHING MILLENNIUM DEVELOPMENT GOALS 4 AND 5

- 2 These investments have enabled the expansion of key services that benefit women and children. Through Global Fund-supported programs:
 - at the end of 2009, 2.5 million people the majority of whom were women were receiving antiretroviral (ARV) therapy;
 - in 2009 alone, 345,000 pregnant women in low- and middle-income countries received treatment to prevent mother-to-child transmission of HIV (PMTCT);
 - by the end of 2009, 104 million insecticide-treated nets had been distributed;
 - by the end of 2009, 4.5 million care and support services had been provided to orphans and other vulnerable children;
 - a broad range of interventions to promote sexual and reproductive health have been provided and programs to address gender-based violence have been supported.
- **3 Global Fund investments are also strengthening health and community systems**, enabling countries to expand the delivery of primary health care services for women and children.
- 4 Finally, the Global Fund is supporting a range of structural interventions to enhance gender equity, increase women's participation in decision-making and protect women against gender-based violence. Grants are building synergies to cohesively address maternal and child health by supporting the integration of services.

3. THE IMPACT OF THESE INVESTMENTS AND INITIATIVES ON THE HEALTH OF WOMEN AND CHILDREN HAS BEEN SUBSTANTIAL.

- **5** For example:
 - · AIDS mortality is decreasing in many high-burden countries that have substantially scaled up access to ARV therapy;
 - integrating HIV services and sexual and reproductive health services has had many benefits, including better quality of care, less duplication of resources and a reduction in HIV-related stigma and discrimination;
 - scaling up coverage of insectide-treated nets is significantly reducing under-five mortality in most-affected countries.

4. DESPITE THE PROGRESS MADE, A LOT MORE CAN AND MUST BE DONE FOR MATERNAL AND CHILD HEALTH.

- 6 Many opportunities exist for addressing the remaining gaps in achieving maternal and child health goals by expanding service delivery and better integrating needed services with HIV, TB and malaria services. The Global Fund is committed to playing a central role in the efforts that will be required in this regard.
- 7 This will include implementation of the Global Fund's gender strategy as well as its recent initiative to vastly reduce mother-to-child transmission of HIV. Under that initiative, the Global Fund has committed to increasing the coverage and efficacy of PMTCT programs over the next 18 months (in collaboration with multilateral and bilateral partners) by seizing opportunities to reallocate unspent funds in current grants and by ensuring quality standards in new proposals. Funding requests in 2010 and 2011 are expected to increase substantially in order to scale up PMTCT and address linkages between PMTCT and reproductive and maternal health services.

INTRODUCTION

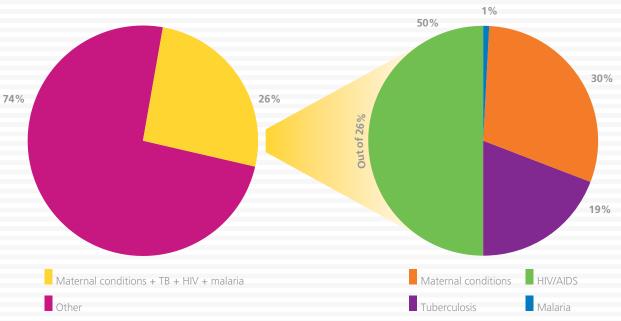
- 1 As HIV, TB and malaria place a heavy burden on the health of women and children, Millennium Development Goals 4 (reducing child mortality), 5 (improving maternal health) and 6 (combating HIV, malaria and other diseases) are closely interlinked. Together, HIV, TB and malaria directly cause 1.1 million deaths a year among women aged 15 to 59 and another 1.2 million deaths among children aged 0 to 14.1 In addition, HIV and malaria are among the most common indirect causes of maternal deaths. The three diseases worsen pregnancy and child health outcomes. HIV, TB and malaria place such a heavy burden on the health of women and children that progress on Millennium Development Goal 6 is directly linked to achievement of Millennium Development Goals 4 and 5.
- 2 The purpose of the Global Fund is to make a "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." Since the founding of the Global Fund, there has been a recognition that additional resources for AIDS, TB and malaria make a contribution not only to fighting the three diseases, but contribute directly also to the other health-related Millennium Development Goals. There is now compelling evidence that successful HIV, TB and malaria investments positively impact the health of women and children.
- 3 This paper highlights how Global Fund support to countries has contributed to progress in achieving Millennium Development Goals 4 and 5 and analyzes the impact it has had on the lives of millions of women and children.
- 4 Investments to improve the health of women and children have been a part of the Global Fund portfolio since inception, through:
 - scaling up health interventions such as the provision of ARV therapy, management of sexually transmitted infections, PMTCT and malaria prevention and treatment to achieve universal coverage;
 - strengthening health and community systems, enabling countries to expand the delivery of core primary health care interventions and generate demand for services;
 - supporting a range of structural interventions to enhance gender equity, increase women's participation in decision-making and protect women against gender-based violence.
- 5 The Global Fund also has a number of specific policies and is undertaking initiatives to promote gender equality and accelerate the scale-up and efficacy of PMTCT and malaria prevention, including:
 - Scaling up PMTCT by urging Country Coordinating Mechanisms to improve the health of HIV-positive pregnant women and children through effective PMTCT and pediatric HIV care and treatment programs (Nineteenth Board Meeting, 2009).³
 - Achieving universal coverage of insecticide-treated nets for malaria prevention by urging countries to submit ambitious proposals aimed at scaling up comprehensive malaria control programs linked to broader efforts to strengthen health systems (Seventeenth Board Meeting, 2008).⁴
 - Promoting gender equality in the response to HIV, TB and malaria and addressing the needs of women and girls through the adoption and implementation of a gender equality strategy. This strategy commits the Global Fund to supporting countries in taking gender dimensions into account in their proposals and to increasing investments aimed at improving the health of women and girls.⁵
 - Under the new grant architecture approved by the Board at the end of 2009, providing additional support to countries to generate disaggregated data.
- 6 The Global Fund is committed to continuing to strengthen its contribution to maternal and child health. Despite the progress made (thanks in part to programs funded by the Global Fund), efforts to reduce child mortality and improve maternal health need to be scaled up to meet the health needs of women and children globally.
- 1 Calculated from statistical annexes to the report Global Burden of Disease: 2004 Update, published by World Health Organization in 2008.
- 2 The Framework Document of the Global Fund to Fight AIDS, Tuberculosis and Malaria.
- 3 Global Fund. Nineteenth Board Meeting, Enhancing the Global Fund's response to HIV/AIDS, Decision Point GF/B19/DP34.
- 4 Global Fund. Seventeenth Board Meeting, Building up a demand for a scaled malaria response, Decision Point GF/B17/DP18
- 5 Global Fund. Eighteenth Board Meeting, The Global Fund's Strategy for Ensuring Gender Equality in the response to HIV/AIDS, Tuberculosis and Malaria: The "Gender Equality Strategy", GF/B18/4 Addendum Decision.

THE BURDEN OF HIV, TUBERCULOSIS AND MALARIA ON WOMEN AND CHILDREN

A. WOMEN

- 1 Together, HIV, TB and malaria cause 1.1 million deaths a year worldwide among women aged between 15 and 59. Along with maternal conditions, HIV, TB and malaria account for 26 percent of all deaths among women in this age group (Figure 1).⁶ In women of childbearing age, HIV is the leading cause of death globally.⁷ In sub-Saharan Africa, where the burden of HIV is heavily concentrated in women (Figure 2), HIV alone is responsible for 46 percent of all deaths among women in this age group while HIV, TB and malaria combined account for almost 52 percent of deaths.
- 2 HIV and AIDS and malaria are also among the most common indirect causes of maternal deaths in developing countries.⁸ In South Africa, for example, maternal mortality in HIV-positive women is more than six times higher than in HIV-negative women.⁹ In another study in South Africa, at least 38 percent of all maternal deaths were shown to be caused by nonpregnancy-related causes, mainly HIV, TB and pneumonia.¹⁰ An autopsy study in Mozambique in 2002-2004 attributed 13 percent of maternal mortality to HIV-related conditions and 10 percent to severe malaria.¹¹ In a study in Zambia, 58 percent of maternal deaths were caused by indirect, nonobstetric causes, the majority of which were linked to malaria and to AIDS-associated TB.¹²

FIGURE 1: DISTRIBUTION OF CAUSES OF DEATH AMONG WOMEN AGED 15 TO 59 WORLDWIDE (2004)



Source: Calculated from statistical annexes of the report Global Burden of Disease, 2004 Update, WHO 2008.

⁶ Calculated from Statistical Annexes of the report: Global Burden of Disease, 2004 Update, WHO (2008) Op. Cit.

⁷ WHO. Women and Health: Today's Evidence, Tomorrow's Agenda. 2009 (Page 43).

⁸ Cross S. et al. What you count is what you target: the implications of maternal death classification for tracking progress towards reducing maternal mortality in developing countries. *Bull World Health Organ* 2010;88:147-153.

⁹ Black V et al. Effect of human immunodeficiency virus treatment on maternal mortality at a tertiary center in South Africa: A 5-year audit. Obstetrics and Gynecology 114 (2), 292-299, 2009.

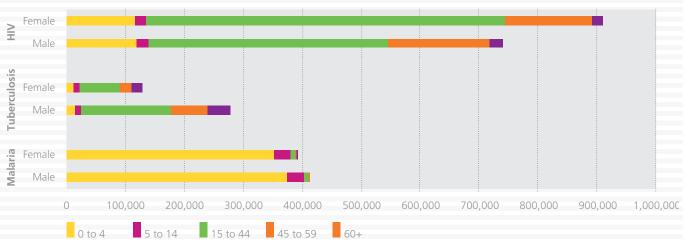
¹⁰ Bradshaw, D., et al. (2008). Every death counts: Use of mortality audit data for decision making to save the lives of mothers, babies, and children in South Africa. *Lancet*, 371(9620), 1294-1304.

¹¹ Menendez, C., et al. (2008). An autopsy study of maternal mortality in Mozambique: The contribution of infectious diseases. PLoS Med, 5(2), e44.

¹² Ahmed Y et al. A study of maternal mortality at the University Teaching Hospital, Lusaka, Zambia: the emergence of tuberculosis as a major non-obstetric cause of maternal death. Int J Tuberc Lung Dis 3(8):675-680.

3 Further, HIV, TB and malaria cause considerable morbidity among women. Around 15.7 million women were living with HIV in 2008. Women account for 50 percent of all people living with HIV worldwide, and for 60 percent in Africa. Around 3.6 million incident TB cases occurred in women in 2008 – 38 percent of the total number of TB cases that year - and women bear a relatively higher burden of TB in countries with high HIV prevalence. HIV and malaria also result in adverse maternal outcomes. In Mozambique, for example, HIV-positive women were more likely to have anemia at delivery than HIV-negative women. Freventing HIV and malaria and providing support to HIV-positive women during pregnancy, childbirth and breastfeeding are thus key elements of effective reproductive health care. In addition, gender inequality and stigma need to be addressed as they remain common barriers to scaling up HIV, malaria and reproductive health services.

FIGURE 2: DISTRIBUTION OF HIV, TUBERCULOSIS AND MALARIA DEATHS IN SUB-SAHARAN AFRICA BY SEX AND AGE



Source: Calculated from statistical annexes of the report Global Burden of Disease, 2004 Update, WHO 2008.

¹³ Report on the Global AIDS Epidemic, UNAIDS, 2008 (Page 33)

¹⁴ Global Tuberculosis Control: A short update to the 2009 report. WHO, 2009 (Page 4).

¹⁵ Naniche et al. Impact of Maternal Human Immunodeficiency Virus Infection on Birth Outcomes and Infant Survival in Rural Mozambique. Am. J. Trop. Med. Hyg., 80(5), 2009, pp. 870-876

B. CHILDREN

- **4** HIV, TB and malaria combined directly cause 10 percent of all deaths (1.2 million) among children aged 0 to 14, with 1 million of these deaths occurring in children aged 0 to 4. HIV, TB and malaria also contribute indirectly to deaths from perinatal conditions, including prematurity and low birth weight. Together, HIV, TB, malaria and perinatal conditions account for 41 percent of all deaths among young children aged 0 to 4. ¹⁶
- **5** Malaria heavily impacts children, directly as well as indirectly, by interacting with other common causes of child death to increase overall mortality among children under the age of five (Figure 2). Children account for more than 80 percent of all malaria deaths worldwide.¹⁷ In sub-Saharan Africa, malaria is the direct cause of nearly 17 percent of all deaths in children.¹⁸
- 6 HIV and malaria also cause morbidity among children. In malaria-endemic areas, nearly 20 percent of low birth weight is attributable to malaria. With interventions to prevent mother-to-child transmission of HIV, the risk of transmission from an HIV-positive mother to her baby can be reduced to less than 2 percent. Yet 430,000 children were newly infected with HIV in 2008, the majority through mother-to-child transmission. Ninety percent of these children live in sub-Saharan Africa. Live 11 Furthermore, over 14 million children have lost one or both parents to AIDS. While the burden of TB among children has not been sufficiently studied, it has been found that HIV contributes to childhood TB burden and that TB treatment outcomes in children are poor. Live 123,24

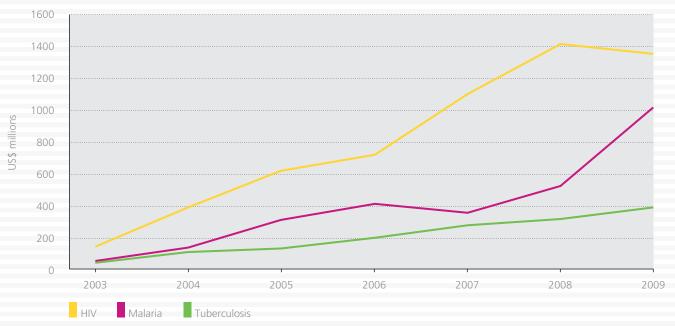
C. HIV, TUBERCULOSIS AND MALARIA PROGRAMS IMPROVE MATERNAL AND CHILD HEALTH OUTCOMES

- There is evidence that scale-up of HIV, TB and malaria programs has had a positive impact on the health of women and children. Studies in Africa have shown declines in overall mortality in women and men following the widespread availability of ARV therapy.^{25,26} Integrating HIV services (such as HIV testing, PMTCT and ARV therapy) and sexual and reproductive health services (family planning, maternal and child health and management of sexually transmitted infections) has been shown to have numerous benefits, including better quality of care, less duplication of resources and a reduction in HIV-related stigma and discrimination. In malaria-endemic settings in Africa, it has been estimated that scaling up coverage of insecticide-treated nets would reduce all-cause under-five mortality by an average of 17 percent.
- 8 Yet major gaps remain in achieving maternal and child health goals. The Countdown to 2015 for Maternal, Newborn and Child Survival initiative notes that maternal mortality remains high in the 68 countries that comprise 97 percent of maternal and child deaths. Many countries report a substantial unmet need for family planning among married women, as well as for greater access to skilled birth attendants and clinical case management of newborn and child illness. The coverage of these services can be increased more rapidly by harnessing opportunities for integrated delivery with HIV, TB and malaria services.
- 16 Calculated from Statistical Annexes of the report: Global Burden of Disease, 2004 Update, WHO (2008) Op. Cit.
- 17 Calculated from Statistical Annexes of the report: Global Burden of Disease, 2004 Update, WHO (2008) Op. Cit.
- 18 Rowe AK, Rowe SY, Snow RW et al. The burden of malaria mortality among African children in the year 2000. Int J Epidemiol 2006;35(3):691-704.
- 19 WHO. Africa Malaria Report, 2003
- 20 Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector: Progress Report 2009. WHO, UNICEF, UNAIDS, 2009 (Page 88).
- 21 PMTCT Strategic Vision 2010-2015, WHO, 2010 (Page 6).
- 22 Framework for the protection, care and support of orphans and vulnerable children living in a world with HIV and AIDS, UNAIDS, 2004 (Page 7).
- 23 Lolekha R et al. Childhood TB epidemiology and treatment outcomes in Thailand: a TB active surveillance network, 2004 to 2006, BMC Infectious Diseases 2008, 8:94 doi:10.1186/1471-2334-8-94.
- 24 Harries AD et al. Childhood tuberculosis in Malawi: nationwide case-finding and treatment outcomes, Int J Tuberc Lund Dis 6(5):424-431.
- 25 Herbst et al. Adult mortality and antiretroviral treatment roll-out in rural KwaZulu-Natal, South Africa. Bull World Health Organ. 2009 Oct;87(10):754-62.
- 26 Makombe et al. A national survey of the impact of rapid scale-up of antiretroviral therapy on health-care workers in Malawi: effects on human resources and survival. Bull World Health Organ.; Vol 85, Nov 11, 2007.
- 27 Sexual & reproductive health and HIV. Linkages: evidence review and recommendations, WHO, 2008.
- 28 Lengeler C. Insecticide-treated bed nets and curtains for preventing malaria (Cochrane review), 2004.
- 29 Countdown Coverage Writing Group, Countdown to 2015 for maternal, newborn and child survival: the 2008 report on tracking coverage of interventions, *Lancet* 2008, 371:1247-58

INPUTS: GLOBAL FUND INVESTMENTS

- 1 The Global Fund strives to ensure that its financial investments and policies benefit those most in need, through implementation of its core principles of performance-based funding, country ownership, multistakeholder representation and its commitment to work to achieve universal coverage.
- 2 From its founding through December 2009, the Global Fund approved proposals totaling over US\$ 19 billion, and disbursed a cumulative total of US\$ 5.7 billion for HIV programs, US\$ 1.5 billion for TB programs and US\$ 2.8 billion for malaria programs. By strengthening country systems and also providing expanded services for HIV, TB and malaria, the Global Fund-supported programs are contributing to improved service delivery capacity in countries, increasing treatment and prevention services that benefit women and children.
- **3** Figure 3 shows the annual trend in Global Fund **disbursements** between 2003 and 2009. During this period, Global Fund disbursements for HIV and TB increased over ninefold and disbursements for malaria increased over 20-fold.

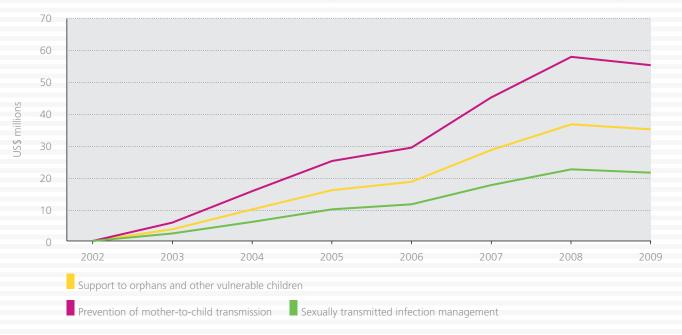
FIGURE 3: GLOBAL FUND DISBURSEMENTS BY DISEASE AND BY YEAR (2003-2009)



NOTE: The decline in ARV therapy disbursements between 2008 and 2009 is not statistically significant. It can be attributed to several grants becoming inactive and being replaced by new grants, and the timing of the grant closures and of the opening of new grants.

4 Global Fund disbursements for ARV therapy increased from US\$ 34 million in 2003 to US\$ 330 million in 2009. Over the same period, disbursements for selected non-ARV therapy interventions that contribute to improving the health of women and children (sexually transmitted infection management, PMTCT and care and support for orphans and other vulnerable children) increased from US\$ 11.7 million to US\$ 112 million (Figure 4).³⁰

FIGURE 4: TRENDS IN SELECTED GLOBAL FUND DISBURSEMENTS:
CARE AND SUPPORT FOR ORPHANS AND OTHER VULNERABLE CHILDREN, PMTCT AND SEXUALLY TRANSMITTED INFECTION MANAGEMENT, 2003-2009



5 Global Fund disbursements for malaria treatment increased from US\$ 13.6 million in 2003 to US\$ 280.7 million in 2009, and for selected nontreatment interventions which contribute to improving maternal and child health (insectide-treated nets, malaria diagnosis, malaria prevention during pregnancy) from US\$ 18 million to US\$ 374 million.

³⁰ Disbursements by intervention area have been estimated based on data on expenditures in these areas obtained through the Global Fund's Enhanced Financial Reporting system.

6 Funding commitments for HIV, TB and malaria programs have increased substantially in recent years. Figure 5 presents the **total lifetime budgets** of approved proposals from Rounds 1 to 9. Rounds 8 and 9 (in 2008 and 2009) have been the largest funding rounds so far, with particularly sizable increases in commitments for TB and malaria grants. This will enable countries to further accelerate the scale-up of services.

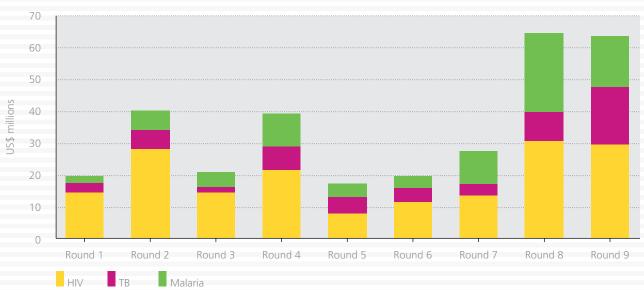


FIGURE 5: TOTAL LIFETIME BUDGETS OF APPROVED GRANTS, ROUNDS 1 TO 9

Source: Global Fund Advanced Program Search database, Global Fund website accessed 2 March 2010.

Note: (1) Round 9 includes funding for National Strategy Applications. (2) Standalone grants for HIV/TB (seven grants, Rounds 1 to 3, total US\$ 231 million), health systems strengthening (three grants, Round 5, total US\$ 90 million) and integrated proposals (one grant, Round 2, total US\$ 3 million) are not included in this figure. Total lifetime budget refers to five-year upper monetary ceiling for grants that have been approved by the Global Fund Board.

- 7 A number of studies have explored the **additionality of funding for HIV, TB and malaria in relation to overall investments in health**. An analysis of global health financing trends shows that, overall, development assistance for health has grown from US\$ 5.6 billion in 1990 to US\$ 21.8 billion in 2007, with a sharp increase since 2002. The Global Fund has accounted for an increasing share of development assistance for health, from less than 1 percent in 2002 to 8.3 percent in 2007. The study shows that although HIV and AIDS, TB and malaria account for an important part of the expansion in development assistance for health, other areas of health have also increased, and that total assistance received by low- and middle-income countries was positively correlated with burden of disease.³¹
- 8 The Five-Year Evaluation of the Global Fund found that in the countries that participated in the evaluation, **resources for child, maternal and neonatal health grew between 2003 and 2006**, although not at the same pace as resources for HIV and AIDS programs.³² There have been gradual improvements in the coverage of maternal and child health interventions over the study period. In Rwanda, for example, where external funding for HIV represented 27 percent of the total health expenditure during 2003-2006, improvements were observed not only in the expansion of HIV services but also in the coverage of immunization, family planning, treatment of childhood illness and maternal care. In Malawi, where approximately 20 percent of the total health expenditure related to HIV and AIDS in 2007, coverage of family planning services and treatment of acute lower respiratory infection show substantial increase after 2004.

³¹ Ravishankar N et al. Financing of global health: tracking development assistance for health from 1990 to 2007. Lancet (2009); 373:2113-24.

³² Macro International Inc. Global Fund Five-Year Evaluation: Study Area 3 – The Impact of Collective Efforts on the Reduction of the Disease Burden of AIDS, TB and Malaria. May 2009 (Section 8).

OUTPUTS: REACHING WOMEN AND CHILDREN WITH SERVICES

1 Global Fund financing has enabled a major expansion of key HIV and malaria services that benefit women and children. Table 1 summarizes the main results for ARV therapy, PMTCT and insectide-treated nets. The year 2009 saw substantial increases in service delivery as well as an increased contribution of Global Fund-supported programs towards international targets for HIV, TB and malaria.

TABLE 1: COVERAGE OF KEY INTERVENTIONS - GLOBAL AND GLOBAL FUND-SUPPORTED RESULTS

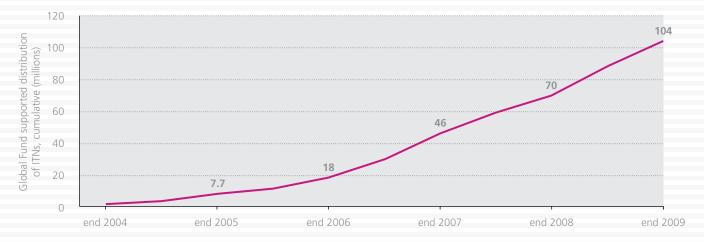
Intervention	Global Fund-supported service de	Global coverage available data		
	Cumulative as of Dec 2009	2009 alone	for 2008 or 2009	
People currently on ARV therapy	2.5 million people on ARV therapy, around 60 percent women*	500,000 additional people on ARV therapy in Dec 2009 (compared to Dec 2008)	4.03 million people on ARV therapy Dec 2008	
PMTCT	790,000 HIV-positive women given ARV prophylaxis	345,000 HIV-positive women given ARV prophylaxis	628,000 HIV-positive women given ARV prophylaxis 2008	
Insectide- treated net	104 million insectide-treated nets distributed ³³	34 million insectide-treated nets distributed	95 million insectide-treated nets distributed 2009	

- **2 ARV therapy: at** the end of 2009, 2.5 million people were receiving ARV therapy through Global Fund-supported programs an increase of 500,000 people from the end of 2008. This compares to a total of 4.03 million people in low- and middle-income countries receiving ARV therapy by the end of 2008. Of those receiving ARV therapy in 2008, 60 percent were women.
- **3 Prevention of mother-to-child transmission of HIV:** from 2004 when the Global Fund began measuring results of the programs it supports to the end of 2009, 790,000 HIV-positive pregnant women received a complete course of ARV prophylaxis to prevent mother-to-child transmission. In 2009 alone, 345,000 pregnant women in low- and middle-income countries received PMTCT treatment through Global Fund grants. This represents a substantial increase over previous years, and corresponds to more than half of the total number of 630,000 HIV-positive pregnant women in these countries who received PMTCT treatment from all donor-supported programs in 2008.

³³ Each insectide-treated net is estimated to provide six person-years of protection, i.e. three years of protection for two people. (Global Malaria Action Plan, Roll Back Malaria Partnership, 2008).

4 Insecticide-treated nets for malaria prevention: From 2004 to 2009, new financing from the Global Fund enabled countries to distribute a total of 104 million insectide-treated nets (Figure 6). Around 34 million nets were distributed in 2009 alone – 48 percent more than in 2008. Of the 34 million nets distributed in 2009, 22.5 million were distributed in sub-Saharan Africa, where in 2008 a total of 38.1 million nets had been distributed by all sources. Between 1999-2004 and 2005-2008, the percentage of pregnant women who slept under an insectide-treated net in the 25 countries receiving the largest Global Fund contribution towards their malaria programs increased from 2 to 21 percent; and the percentage of children under five who slept under an insectide-treated net increased from 2 to 23 percent.³⁴

FIGURE 6: GLOBAL FUND-SUPPORTED DISTRIBUTION OF INSECTICIDE-TREATED NETS (2004-2009)



- **5** Care and support for orphans and other vulnerable children: the Global Fund has provided 4.5 million basic care and support services to orphans and other vulnerable children from 2004 to 2009, of which 1.3 million were provided in 2009 alone.
- 6 Interventions to promote sexual and reproductive health: the Global Fund has provided support for delivering key interventions related to sexual and reproductive health. A review of successful HIV proposals submitted to the Global Fund in Rounds 1 to 7 showed that proposals include a wide range of interventions:³⁵
 - 70 percent included one or more of the four broad elements of sexual and reproductive health (information, education and communication related to sexual and reproductive health; condom promotion/distribution; diagnosis and treatment of sexually transmitted infections and PMTCT);
 - 20 percent included interventions to address gender-based violence;
 - 30 percent included HIV testing and counseling programs integrated in sexual and reproductive health services.³⁶

³⁴ Calculated from data from countries which conducted repeat Demographic and Health Surveys (DHS) between 1999 and 2008, MACRO DHS.

³⁵ Lusti-Narasimhan M et al. Sexual and reproductive health in HIV-related proposals supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria. *Bull World Health Organ* 2009; 87:816-823

³⁶ Percentages add up to >100 percent because of overlaps among proposals which included multiple interventions.

HEALTH IMPACTS

- 1 Interventions supported by the Global Fund have had a major impact in terms of saving lives and preventing new infections. The following are some examples (see Table 2 for more information on the estimated health impacts and the methods used for estimation³⁷):
 - Global Fund-supported ARV therapy programs are estimated to have saved at least 1.3 million lives by December 2009, of which around 60 percent would be women.
 - ARV prophylaxis to HIV-positive pregnant women is estimated to have averted 82,000 new HIV infections among children since 2003, including 35,000 in 2009 alone. As countries implement the revised World Health Organization (WHO) guidelines with more efficacious PMTCT regimens in coming years, the impact per woman accessing PMTCT is expected to increase by up to three-fold
 - The 104 million insectide-treated nets distributed through Global Fund-supported malaria programs have saved at least 254,000 lives among children under five.

TABLE 2: IMPACTS OF HIV AND MALARIA INVESTMENTS ON MATERNAL AND CHILD HEALTH

Intervention	Global Fund-supported service deliveries		Estimated health impact		Method health impact estimation	
	Cumulative as of Dec 2009	2009 alone	Cumulative as of Dec 2009	2009		
ARV therapy	2.5 million people on ARV therapy	500,000 people more people on ARV therapy (in Dec 2009 as compared with Dec 2008)	1.3 million lives saved, of which 60 percent in women		Spectrum epidemiological model ^{38,39,40}	
PMTCT	790,000 HIV- positive women given ARV prophylaxis	340,000 HIV- positive women given ARV prophylaxis	82,000 HIV infections averted	35,000 HIV infections averted	Futures Institute, unpublished ^{41,42}	
Insectide- treated net	104 million insectide-treated nets distributed	34 million insectide- treated nets distributed	254,000 lives saved, all in children under five	93,000 lives saved, all in children under five	LiST epidemiological model ⁴³	

³⁷ Detailed assumptions and estimation methods are described in the following paper, also prepared by the Global Fund for the Replenishment Conference: Financial and Health Impacts of Continued Support to the Three Diseases: Long-term Estimates.

³⁸ Komatsu R , Korenromp EL, Low-Beer D et al. Lives saved by Global-Fund supported programs: estimation approach and end-2006 results. *Biomed Central Medicine* 2010 (accented)

³⁹ The Global Fund Results Report 2010: Innovation and Impact. The Global Fund to Fight AIDS Tuberculosis and Malaria, Geneva, 2010.

⁴⁰ Stover J, Johnson P, Zaba B et al. The Spectrum projection package: improvements in estimating mortality, ART needs, PMTCT impact and uncertainty bounds. Sex Transm Infect 2008;84 Suppl 1:i24-i30

⁴¹ Futures Institute (unpublished). HIV infections averted by PMTCT were estimated based on the following assumed rates of perinatal HIV transmission, as infections per HIV-infected woman giving birth:

⁻ in absence of PMTCT. 33 percent – based on 20 percent peripartum + (among infants who did not get infected peripartum) 16.5 percent through breastfeeding

⁻ with PMTCT in current (2008-2009) practice: 23 percent – based on 14 percent peripartum + (among infants who did not get infected peripartum) 16.5 percent through breastfeeding

⁴² Stover J et al. (2008) Op. Cit.

⁴³ Eisele TP, Larsen D, Steketee RW. Protective efficacy of interventions for preventing malaria mortality in children in Plasmodium falciparum endemic areas. *Int J Epidemiol*. In press 2010.

2 The positive health impacts have been well documented in a number of countries. For example, in Rwanda , where Global Fund financing supported the free provision of insecticide-treated nets, inpatient malaria cases in children below the age of five fell by 55 percent and deaths fell by 67 percent between 2001-2006 and 2007. ⁴⁴ In Ethiopia , the Global Fund has supported the expansion of the primary health care infrastructure and work force under the country's Health Extension Program. Maternal mortality has declined from 1,400 per 100,000 live births in 1994 to 673 per 100,000 in 2005, ⁴⁵ and the proportion of births assisted by a skilled birth attendant increased from 13 percent in 2005 to 29 percent in 2008. Additional examples of the impact of Global Fund-supported programs are provided in the annexes.	
supported programs are provided in the annexes.	
44 Otten M. et al. Initial evidence of reduction of malaria cases and deaths in Rwanda and Ethiopia due to rapid scale-up of malaria prevention and treatment. <i>Malaria Journal</i> 2009, 8:14doi:10.1186/1475-2875-8-14.	

45 Abraha et al. Modeling trends of health and health related indicators in Ethiopia (1995-2008): a time-series study. Health Res Policy Syst. 2009; 7: 29

THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION INITIATIVE: ACCELERATING SCALE-UP TO PREVENT VERTICAL TRANSMISSION OF HIV

- 1 Following a May 2009 decision by the Board, the Global Fund is undertaking an initiative focusing on the scale-up of PMTCT.⁴⁶ The Global Fund is prioritizing PMTCT and, together with recipient countries and the Global Fund's multilateral and bilateral partners, is committed to improving existing PMTCT services for women and their families, and to scaling up access to PMTCT in the countries with the highest burden of mother-to-child transmission of HIV.⁴⁷ In order to achieve this, the Global Fund has set two ambitious but achievable targets. Over the next 18 months, the Global Fund will work to:
 - ensure that at least 80 percent of HIV-positive mothers reached through Global-Fund supported programs receive the most optimal regimen to prevent transmission; and
 - scale up PMTCT coverage to reach at least 60 percent of HIV-positive mothers in a number of high-burden countries.
- 2 The Global Fund is working with countries and other partners to reprogram existing grants in order to ensure that current services provide the most optimal regimen and comprehensive services. Reprogramming a grant is done in consultation with Principal Recipients and the Country Coordinating Mechanism, and the scope of the changes is discussed and agreed upon. UN partners including the United Nations Children's Fund (UNICEF), WHO, the United Nations Joint Programme on HIV/AIDS (UNAIDS), United Nations Population Fund (UNFPA) as well as other partners such as the Children's Investment Fund Foundation, the Clinton HIV/AIDS Initiative and civil society networks are providing invaluable support to the process both globally and at the country level.
- 3 In addition to finding opportunities to reprogram existing grants, countries applying for funding through Round 10 will be encouraged to submit proposals with robust PMTCT components, including a "best package" of care that contains comprehensive programming (counseling and testing, sexual and reproductive health services, implementation of appropriate infant feeding, nutritional support, treatment for mother, infant and family, extended prophylaxis, early infant diagnosis, etc.). This will also be an opportunity to link PMTCT to broader objectives of improving reproductive, maternal and child health services.

⁴⁶ Global Fund. Nineteenth Board Meeting, Enhancing the Global Fund's response to HIV/AIDS, Decision Point GF/B19/DP34.

CONCLUSIONS

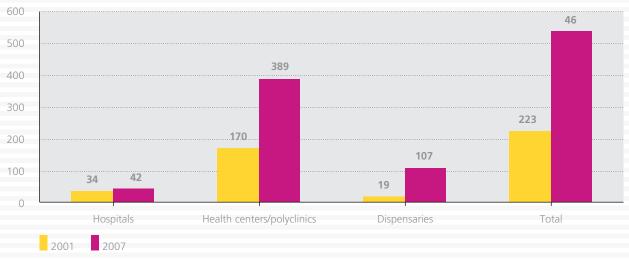
- 1 This paper has shown how Global Fund investments to combat HIV, TB and malaria are making a substantial contribution towards reaching Millennium Development Goals 4 and 5, enabling the expansion of key services that benefit women and children and strengthening health and community systems, thus allowing countries to expand the delivery of primary health care services for women and children. The Global Fund is supporting a range of structural interventions to enhance gender equity, increase women's participation in decision-making and protect women against gender-based violence. Grants are building synergies to cohesively address maternal and child health by supporting integration of services.
- 2 The impact of these investments and initiatives on the health of women and children has been substantial. To mention only a few examples, AIDS mortality is decreasing in many high-burden countries that have substantially scaled up access to ARV therapy. Integrating HIV services and sexual and reproductive health services has had many benefits, including better quality of care, less duplication of resources and a reduction in HIV-related stigma and discrimination. And scaling up coverage of insectide-treated nets is significantly reducing under-five mortality in the most-affected countries.
- 3 However, despite the progress made, a lot more can and must be done for maternal and child health. Many opportunities exist for addressing the remaining gaps in achieving maternal and child health goals by expanding service delivery and better integrating needed services with HIV, TB and malaria services. The Global Fund is ready and committed to playing a central role in the efforts that will be required. This will include implementation of the Global Fund's gender strategy as well as its recent initiative to vastly reduce mother-to-child transmission of HIV.

ANNEX 1: EXAMPLES FROM THE GLOBAL FUND PORTFOLIO — IMPROVING WOMEN'S HEALTH

INVESTING IN HUMAN RESOURCES TO IMPROVE MATERNAL, SEXUAL AND REPRODUCTIVE HEALTH

- 1 In **Malawi**, rapid scale-up of primary health services entirely supported by Global Fund financing has been achieved through the expansion of Health Surveillance Assistants across the country from 4,324 in 2003 to 10,127 in 2008. In addition to delivering HIV, TB and malaria services, Health Surveillance Assistants also provide services such as the supervision of traditional birth attendants, sanitation, disease surveillance, health and nutrition advice, family planning services and community-based maternal and newborn health care.⁴⁸ A recent review of progress towards achieving the Millennium Development Goals in Malawi highlighted good progress. In 2009, 77 percent of facilities provided basic emergency, obstetric and neonatal care, surpassing the target of 50 percent set by the national UN Development Assistance Framework for 2008-2011. Vitamin A supplementation reached 95 percent of children aged 6 to 59 months and measles immunization reached 90 percent coverage. However the review also noted that gender inequalities remain a barrier to improving health outcomes for women, and capacity to disaggregate data by sex remains limited.⁴⁹
- 2 In **Rwanda**, the Global Fund has committed US\$ 77.8 million for strengthening human resources. This investment, along with commitments from the national government and other donors, has resulted in substantial gains in the availability and utilization of services for the prevention and management of sexually transmitted infections. Between 2001 and 2007, the number of facilities providing basic health services (including sexually transmitted infection services, family planning, antenatal care, immunization and outpatient services for sick children) more than doubled (Figure 9), as did the utilization of curative services.^{50,51}

FIGURE 9: NUMBER OF FACILITIES PROVIDING BASIC HEALTH SERVICES IN RWANDA, 2001 AND 2007



Note: Basic health services include sexually transmitted infection services, family planning, antenatal care, immunization and child care.

⁴⁸ Celletti F. et al. (2010). Can the deployment of community health workers for the delivery of HIV services represent an effective and sustainable response to health workforce shortages? Results of a multicountry study. *AIDS*: January 2010 - Volume 24, p S45–S57.

⁴⁹ Mid-Term Review of the UN Development Assistance Framework for Malawi (2008-11). United Nations, Malawi (2009).

⁵⁰ Ministry of Health [Rwanda], National Population Office [Rwanda], and ORC Macro. 2003. Rwanda Service Provision Assessment Survey 2001. Calverton, Maryland: Ministry of Health, National Population Office, and ORC Macro.

⁵¹ National Institute of Statistics (NIS) [Rwanda], Ministry of Health (MOH) [Rwanda], and Macro International Inc. 2008. Rwanda Service Provision Assessment Survey 2007. Calverton, Maryland, U.S.A.: NIS, MOH, and Macro International Inc.

STRENGTHENING HEALTH AND COMMUNITY SYSTEMS TO ADDRESS WOMEN'S NEEDS

- 3 Global Fund programs also support community systems strengthening to promote women's engagement and empowerment.
- 4 In **India**, one of the objectives of the Round 7 HIV proposal is to build a community outreach model for scaling up HIV prevention, care and support in 120 districts in rural areas. The proposal, with a total two-year approved funding of US\$ 8.3 million, recognized that knowledge of and access to sexual and reproductive health services in rural areas is low, and that stigma and discrimination lead to low levels of demand. Male and female "link workers" have been recruited to promote access to information and services related to HIV and sexual and reproductive health, ensure access to a continuum of services and empower women so that they can negotiate safer sex. By September 2009, 30 districts were implementing the "link worker" project, and 785 link workers had been recruited and trained in HIV and rural outreach.
- With Global Fund support, **Ethiopia** is accelerating the expansion of its primary health care infrastructure and work force under the country's Health Extension Program. Over 30,000 health extension workers, recruited from the community, have been trained and deployed in the health services between 2004 and 2009. These health extension workers have played a critical role in scaling up not only HIV and malaria services, but also reproductive and child health services, especially in rural areas (Table 3).^{52,53,54} Under the program, two salaried health extension workers are deployed at each village health post. Most of these workers are women recruited from the local communities in which they will work. The program covers disease prevention and control, hygiene and sanitation, family health services, and health education.⁵⁵ Recent reports also show that the scale-up of ARV therapy in Ethiopia has resulted in a steep decline in population-level AIDS mortality by 50 percent between 2002 and 2007, substantially improved the survival of patients on ARV therapy, and averted 60 percent of the expected number of AIDS deaths in 2007.^{56,57}

TABLE 3. IMPROVEMENTS IN HEALTH SERVICE DELIVERY IN ETHIOPIA BETWEEN 2005 AND 200858

Service Delivery Indicator	2005	2008
Child immunization rate DPT3 (percentage) ^a	70	82
Measles immunization (percentage) ^a	61	76.6
Births attended by health professionals (percentage) ^a	13	24.9
Contraceptive acceptor rate (percentage) ^a	25	56.2
Number of clients on ARV therapy ^b	20,000	132,000
The proportion of women and children among clients on ARV therapy (percentage) ^c	25	55
The proportion of clients on ARV therapy outside national capital (percentage) ^c	35	75
Operational indoor residual spraying coverage (percentage) ^d	7.3	51.4
Operational insecticide-treated nets coverage (percentage) ^d	15.8	71.3

⁵² Assefa, Y et al. (2009). Rapid scale-up of antiretroviral treatment in Ethiopia: Successes and system-wide effects. PLoS Med, 6(4), e1000056.

58 Sources

- a Alebachew, Abebe, Huws, et al. (2009). Interaction between GF Supported Programs and Health Systems: Pathways and Effects: the Ethiopian Experience and Country Experiences. Report commissioned by the Global Fund (Draft) (Data pertains to 2005 and 2008/09).
- b Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector, WHO, UNICEF, UNAIDS, 2009.
- c Assefa, Y et al. (2009). Rapid scale-up of antiretroviral treatment in Ethiopia: Successes and system-wide effects. PLoS Med, 6(4), e1000056.
- d World Malaria Reports, WHO, 2008 and 2009.

⁵³ Abraha MW and Nigatu TH. 2009. Modeling trends of health and health related indicators in Ethiopia (1995-2008): a time-series study. Health Res Policy Syst. 2009; 7: 29.

⁵⁴ Celletti, F et al. (2010). Can the deployment of community health workers for the delivery of HIV services represent an effective and sustainable response to health workforce shortages? Results of a multicountry study. AIDS: January 2010 - Volume 24, p S45–S57

⁵⁵ Wakabi W. Extension workers drive Ethiopia's primary health care. Lancet, Volume 372, Issue 9642, Page 880, 13 September 2008

⁵⁶ Reniers, G., Araya, T., Davey, G. et al. (2009). Steep declines in population-level AIDS mortality following the introduction of antiretroviral therapy in Addis Ababa, Ethiopia. *AIDS*, 23(4), 511-518.

⁵⁷ Seyoum, E., Mekonnen, Y., Kassa, A., et al. (2009). Art scale-up in Ethiopia: Success and challenges. Addis Abeba: Federal Ministry of Health HIV/AIDS Prevention and Control Office

EXPANDING THE PREVENTION AND MANAGEMENT OF SEXUALLY TRANSMITTED INFECTIONS

- In Lao (People's Democratic Republic), the Global Fund has provided support for improving the management of sexually transmitted infections along with expanding access to HIV testing and counseling and referral to prevention and care services, with HIV grants in Rounds 1, 4, 6 and 8. The Round 1 grant scaled up access to sexually transmitted infection diagnosis and treatment for sex workers through behavior change communication, social marketing of condoms, and expanded service delivery involving gynecology outpatient departments of provincial hospitals and outreach services. Later grants focused on expanding access to HIV testing and counseling for sex workers and the general population, ensuring referral to appropriate services, scaling up HIV treatment and strengthening community systems. The percentage of sex workers reporting the use of a condom with their last client increased from 22 percent in 2001 to 63 percent after four years of implementation. The prevalence of gonorrhea among sex workers fell from 25 in 2001 to 7 percent in 2004, and chlamydia prevalence fell from 42 percent to 19 percent.⁵⁹
- 7 In **Cambodia**, a grant in Round 1 expanded the provision of sexually transmitted infection care and treatment in six provinces including the capital city. In 2000, HIV prevalence in direct (brothel-based) and indirect sex workers (women working in the entertainment business and supplementing their income by selling sex) ranged from 8 to 58 percent. The proposal, with a total five-year approved maximum of US\$ 14.7 million, sought to promote the national 100 percent condom use strategy among sex workers, offer them sexually transmitted infection services and conduct outreach and advocacy. The number of sexually transmitted infection consultations by sex workers increased from 1,000 in 2003 to 57,000 in 2005. Studies have shown a decline in the prevalence of HIV among female sex workers, from 21.4 percent in 2003 to 12.7 percent in 2006.⁶⁰
- 8 In the **Eastern Europe and Central Asia** region, programs supported by Global Fund grants (for a total of US\$ 882 million approved by the Global Fund as of mid-2009), among many other things, are providing 22 percent of the estimated 500,000 female sex workers with comprehensive HIV and AIDS and sexually transmitted infections services. Coverage is expected to increase and to reach 28 percent within the next few years under existing grants.

PROTECTING PREGNANT WOMEN FROM MALARIA

9 In **Cameroon**, funding for malaria control increased from less than US\$ 2 million in 2002 to over US\$ 26 million in 2008, provided mostly by the government and the Global Fund.⁶¹ The Round 3 malaria grant included the expansion of intermittent preventive treatment of malaria during pregnancy free of charge. The proposal also included components to train health workers on the management of malaria among pregnant women, and used mass media campaigns targeted at pregnant women on the use of intermittent preventive treatment of malaria. By the end of 2008, 1.6 million pregnant women had received intermittent preventive treatment of malaria.

PROTECTING WOMEN AGAINST VIOLENCE AND PROVIDING SUPPORT SERVICES

- 10 In the two most recent Global Fund rounds (8 and 9), more countries recognized the link between violence against women and HIV and included programming to address these issues in their proposals. This has resulted in a number of innovative proposals seeking to address gender-based violence and to meet the needs of women and girls in a comprehensive manner. Liberia's Round 8 HIV proposal includes mass media campaigns on HIV and sexual violence prevention, and the provision of post-exposure prophylaxis to victims of sexual assault. Mozambique's Round 9 proposal provides for the recruitment of ombudswomen in the workplace to protect women against sexual harassment in the workplace. South Africa's Round 9 proposal includes the provision of HIV testing and counseling to victims of sexual violence, and behavior change outreach to men from migrant communities.
- 11 In **Rwanda**, the Round 7 HIV proposal (with a total two-year approved funding of US\$ 63 million) specifically sought to promote the integration of HIV with reproductive health services and to undertake activities to address gender-based violence. The proposal aims to expand existing infrastructure in 182 health facilities to provide adequate space for mother and child health services, family planning and psychosocial care, especially for victims of gender-based violence. The proposal also aims to set up four specialized violence management centers which provide rights-based education, HIV testing and counseling, referrals to health care, legal services and emergency housing for women who have been victims of violence. By June 2009, around 100 volunteer victim advocates from existing community networks had been trained to assist victims of sexual assault, and health facilities were being equipped to provide integrated reproductive health and HIV services.
- 12 In Eritrea, the Round 8 HIV proposal sought to address the higher rates of HIV infection among women and the risk factors related to gender inequalities. The proposal, with a total two-year approved funding of US\$ 15 million, aims to conduct a needs assessment to understand women's risk factors and vulnerabilities in all zobas (regions); provide life-skills education for young girls; support vulnerable women and girls through income-generating activities; provide gender-sensitive training to health care workers, law enforcement personnel and policy-makers; and review national laws, policies and enforcement realities on protection from gender-based violence. The proposal seeks to expand the number of women supported through income-generating activities from 3,600 in 2009 to nearly 11,000 by 2012, provide micro credit loans for 8,600 women, conduct training sessions for women's peer groups in each zoba, and sensitize all 277 male and 122 female zoba assembly members on issues related to gender, gender-based violence, female genital mutilation, and reproductive health rights.

ENGAGING WOMEN IN DECISION-MAKING

- 1 The Global Fund promotes gender equality in decision-making structures and promotes the participation of members with relevant expertise in the Country Coordinating Mechanisms. An analysis of Round 8 proposals found that, overall, 30 percent of all members of Country Coordinating Mechanisms, sub-Country Coordinating Mechanisms and Regional Coordinating Mechanisms were women. Twenty-five percent of eligible applicants had a gender balance in the Country Coordinating Mechanism, sub-Country Coordinating Mechanism or Regional Coordinating Mechanism. Participation of women in the Country Coordinating Mechanisms is important for many reasons, not least because it helps ensure that the proposals submitted to the Global Fund address the needs of women, men, girls and boys equitably. Preliminary analysis of Round 9 proposals shows that beyond seeking gender balance in the composition of the Country Coordinating Mechanism, applicants are undertaking a variety of measures to integrate gender-related knowledge and expertise on the Country Coordinating Mechanism. Two gender-related indicators have been included in the performance framework of Country Coordinating Mechanisms as part of the new Country Coordinating Mechanism funding policy of the Global Fund.
- 2 The Latin American and Caribbean region has achieved a particularly strong participation of women in the Country Coordinating Mechanisms 45 percent of all members of Country Coordinating Mechanisms in Latin America and Caribbean are women. This is a remarkable achievement in a region where economic participation of women and their participation in decision-making processes are often limited and where there are high levels of sexual and gender-based violence.

ANNEX 2: EXAMPLES FROM THE GLOBAL FUND PORTFOLIO – IMPROVING CHILD HEALTH

SCALING UP MALARIA PREVENTION TO PROTECT CHILDREN

- 1 In **Rwanda**, the Global Fund had disbursed US\$ 107.5 million for malaria control by the end of 2009. Global Fund financing has supported the free provision of insecticide-treated nets, and their distribution was integrated with the measles vaccination program. In September and October 2006, the government of Rwanda conducted a mass distribution of long-lasting insecticidal nets to children under five along with the measles vaccination program, and artemisinin-based combination therapy (ACT) was introduced in 2006 through the public health care system across the country. Successive demographic and health surveys found that the proportion of children who slept under an insectide-treated net the night before the survey increased from 4 percent in 2000 to 56 percent in 2007-2008.⁶³ Inpatient malaria cases in children under five fell by 5 percent and deaths by 67 percent between 2001-2006 and 2007.⁶⁴
- **2 Ethiopia** is the second-largest recipient of malaria grants from the Global Fund, with US\$ 250 million disbursed to the country by end 2009. Ethiopia conducted a mass distribution of long-lasting insecticidal nets between 2005 and 2007, and scaled up the provision of ACT. The Round 2 proposal covered funding for the procurement of a total of 6 million long-lasting insecticidal nets, estimated to cover 30 percent of households at risk of malaria in the country. The Round 5 proposal added funding to purchase an additional 9.2 million long-lasting insecticidal nets required to cover 80 percent of households in rural communities. Inpatient malaria cases among children under the age of five fell by 73 percent between 2001-2005 and 2007, and deaths by 62 percent.⁶⁵

PREVENTING MOTHER-TO-CHILD TRANSMISSION OF HIV AND EXPANDING CARE FOR MOTHERS AND CHILDREN

- **3 Namibia** is the second most sparsely populated country in the world. This poses a challenge to health interventions by impacting on patient access, adherence and case management. Strong political will has contributed significantly to the success of PMTCT in Namibia. The Ministry of Health and Social Services, which is the Principal Recipient of the Global Fund HIV and AIDS portfolio in Namibia, started PMTCT services as a pilot in 2002, scaling up rapidly to 242 (95 percent) of the 256 antenatal care facilities (Namibia has 335 health care facilities in total). The coverage of PMTCT in Namibia is very high: in 2008-2009, 61,981 (99 percent) pregnant women received PMTCT services. Namibia is also expanding care and support for mothers and children. In 2009, 92 percent of HIV-positive women attending antenatal care received CD4 testing, and about 21 percent were found to be eligible to initiate ARV therapy. A program to scale up early infant diagnosis of HIV was introduced in January 2006. Since then, 26,201 tests have been performed and children who need ARV therapy have been receiving it 7,077 in 2008, representing just under 13 percent of all patients on ARV therapy.
- 4 In 2008, an estimated 36,000 HIV-positive pregnant women in **Ethiopia** needed ARV prophylaxis to prevent mother-to-child transmission. The country has embarked on an ambitious plan to reach these women with quality ARV drugs. The current Global Fund grants are targeting 86 percent of the estimated number of HIV-positive pregnant women in need and progress in expanding coverage has been impressive. The number of HIV-positive pregnant women receiving ARVs increased from 3,248 in March-May 2009 to 8,993 women in June-August 2009, reaching 58 percent of the target. The country is on track to achieving universal access to quality ARVs to prevent mother-to-child transmission in 2010.

⁶³ Malaria and Children: Progress in Intervention Coverage, Summary Update 2009, UNICEF, 2009.

⁶³ Otten M. et al. Initial evidence of reduction of malaria cases and deaths in Rwanda and Ethiopia due to rapid scale-up of malaria prevention and treatment. *Malaria Journal* 2009, 8:14doi:10.1186/1475-2875-8-14.

- 5 In **India**, the Global Fund Round 2 grant has enabled the rapid expansion of PMTCT services in the country's six high-prevalence states. Since 2004, 9.6 million pregnant women have been provided with testing and counseling (5.5 million in 2009 alone), 67,000 women have accessed PMTCT services and 35,000 mother-baby pairs have received ARV prophylaxis. Data for 2009 indicate that of 16,467 positive pregnant women identified, 69 percent have accessed ARV prophylaxis. For 1009, India committed to strengthening PMTCT services and to bringing them closer to pregnant women through the establishment of 4,400 additional counseling and testing centers.
- 6 Nigeria has the highest burden of HIV among pregnant women and children worldwide, accounting for approximately 30 percent of the global burden. Around 215,000 HIV-positive pregnant women are estimated to need ARVs to prevent mother-to-child transmission in 2010. While coverage has increased from 2 percent in 2004 to 11 percent, it remains very low, particularly in rural areas. The Global Fund, through the Round 5 grant, is funding ARV prophylaxis for 7,000 pregnant women per year. Increased coverage will be achieved with the newly approved Round 9 HIV proposal, reaching up to 61,000 women per year in 2014. Furthermore, a recently signed grant for health systems strengthening for an amount of US\$ 55 million is funding the upgrading of 925 primary health care facilities and the provision of integrated high-quality health services at community level, including PMTCT.
- **7** Renewed high-level political commitment has created a new momentum to accelerate the scale-up of PMTCT in the country. Nigeria has set ambitious targets, aiming to reach 30 percent coverage in 2010, 50 percent in 2011 and 80 percent in 2015. The national PMTCT guidelines are currently being updated in line with the new WHO guidelines.
- 8 In **Bolivia**, one of the objectives of the Round 3 HIV grant is to expand the coverage of PMTCT services. HIV counseling and testing has been made available in 11 hospitals in all of Bolivia's nine departments, and pregnant women have been informed about the availability of the test, risk factors, and the fact that the risk of transmission to babies can be vastly reduced. During Phase 2 of the proposal, the performance of the grant improved rapidly, due in part to strong political support for the fight against HIV and AIDS from a new government and to the inclusion of a new civil society Principal Recipient who has been working in partnership with the government and technical partners. So far in Phase 2, 96,577 pregnant women have benefited from prenatal care and have received free HIV counseling and testing. Activities will be further strengthened in the three departments with the highest prevalence of HIV in Bolivia under the new Round 9 grant.
- 9 In Romania, the Round 2 HIV program enabled expansion of PMTCT activities at the national level. Two foundations worked closely with public health institutions, local governments and the Ministry of Health to open 18 new HIV counseling and testing centers, develop protocols for pregnant women living with HIV, establish quality assurance systems, provide trainings and continuous medical education for health service providers and run information and education campaigns. In 2004-2008, over 161,000 pregnant women received pre-test counseling and over 156,000 of them consented to being tested for HIV.

PROVIDING A CONTINUUM OF WELFARE, CARE AND SUPPORT TO ORPHANS AND OTHER VULNERABLE CHILDREN

10 In the Central African Republic, the Round 4 HIV grant focused entirely on scaling up care and support for orphans and other vulnerable children. At the end of 2002, the Central African Republic estimated that there were around 140,000 children who had lost one parent or both to AIDS and that at least 10,000 children were living with HIV. The proposal included interventions to provide medical care to children in need, strengthen legal frameworks and protect the legal rights of children, enable educational and socioprofessional integration of older children, and strengthen the capacity of health services, nongovernmental organizations and foster families to provide care. By July 2008, around 22,000 children in need had received medical care and 1,135 HIV-positive children had received ARV therapy. Around 13,500 orphans had been placed in foster families and over 17,000 received sponsorship for education. Also by July 2008, 170 legal experts and nearly 200 members of nongovernmental organizations had been trained in providing care and support to orphans and other vulnerable children.

- 11 In Haiti, the national HIV program is extensively supported by international partners, especially the Global Fund and PEPFAR. With a total approved maximum amount of US\$ 185 million for HIV across Rounds 1, 5 and 7, the Global Fund has supported the national program to expand PMTCT coverage from 7 percent in 2005 to 46 percent in 2008.⁶⁷ The Round 5 HIV grant included the provision of care and support services for orphans and other vulnerable children. At the time of proposal submission, Haiti estimated that there were around 165,000 orphans in the country, of whom less than 1,000 received organized care. The proposal aimed to reach 25,000 children with support for schooling and psychosocial care, and provide foster families with support to care for children in need. At the end of 2008, nearly 6,500 orphans and other vulnerable children had been reached with care and support services and 1,800 caretakers had been trained.
- 12 Proposals submitted in recent rounds have also included the provision of welfare, care and support for orphans and other vulnerable children. **Lesotho**'s Round 9 proposal is providing social transfers, social services, social insurance, and legal services to orphans and other vulnerable children. The **Belize** Round 9 proposal is providing cash transfers to orphans to provide them with nutritional, education and psychosocial support. **Rwanda**'s Round 7 grant is strengthening a community-based response to support orphans and other vulnerable children and provide them with educational grants and livelihood training.
- 13 In Romania, the Round 6 HIV Program, coordinated by the Romanian Angel Appeal Foundation, a nongovernmental organization, aims to increase the access of vulnerable and poor populations to prevention and treatment services, and to ensure services and support for young persons living with HIV. The Romanian Anti-AIDS Association (ARAS) has run prevention activities for street children and youth in 11 regions with the aim of reducing the risk of HIV transmission. Since mid-2007, more than 2,300 street children and youth have been reached by outreach workers with counseling and education sessions on HIV and AIDS and other sexually transmitted infections, referred to medical services, received condoms and information materials and benefited from peer education training.
- 14 In Russia, one of the objectives of the Round 3 funded HIV project (GLOBUS) was to decrease HIV rates among homeless children. For this, GLOBUS worked in four Russian regions from St Petersburg on the Baltic Sea to Vologda in North Russia to Kazan in Central Russia and to Tomsk in Siberia. While the focus of the activities was HIV, the project provided comprehensive medical, psychological and social assistance that included HIV counseling and testing, outreach to street children, first aid and regular medical checkups, provision with food and clothing, information, case management, and visits to theaters and exhibitions. More than 10,000 homeless children or 70 percent of the estimated number of children in need in the project cities were reached with prevention services and 1,988 of the children were tested for HIV, sexually transmitted infections and hepatitis and received counseling.

PROVIDING FREE OR SUBSIDIZED SERVICES TO CHILDREN FROM THE POOREST HOUSEHOLDS

The Global Fund supports the provision of free or subsidized services to ensure that programs are able to reach the most disadvantaged, vulnerable or marginalized populations. In **Kenya** (which is among the five countries with the highest estimated numbers of malaria cases in Africa⁶⁸) the Global Fund has supported the national malaria strategy through grants in Rounds 2 and 4, disbursing a total of US\$ 107 million to scale up malaria prevention and treatment. The Round 4 grant supported the distribution of 3.4 million long-lasting insecticidal nets free of charge to pregnant women and children under the age of five in malaria-endemic districts in 2006. The proportion of children sleeping under an insectide-treated net increased from 7 percent in 2004-2005 to 67 percent in 2006-2007. A study on equity in access to nets found that nets provided through the Global Fund-supported free mass distribution campaign preferentially covered children from the poorest households as compared to other approaches of social marketing or subsidized distribution in maternal and child health clinics.⁶⁹

^{67.} Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector. Progress Reports 2007, and 2009, WHO, UNICEF, UNAIDS, 2007, and 2009. 68 World Malaria Report. WHO. 2008.

⁶⁹ Noor et al. Increasing Coverage and Decreasing Inequity in Insecticide-Treated Bed Net Use among Rural Kenyan Children. *PLoS Med* 4(8): e255. doi:10.1371/journal. pmed.0040255.



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