Global Fund-supported programmes’ contribution to international targets and the Millennium Development Goals: an initial analysis
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**Objective** The Global Fund to Fight AIDS, Tuberculosis and Malaria is one of the largest funders to fight these diseases. This paper discusses the programmatic contribution of Global Fund-supported programmes towards achieving international targets and Millennium Development Goals, using data from Global Fund grants.

**Methodology** Results until June 2006 of 333 grants supported by the Global Fund in 127 countries were aggregated and compared against international targets for HIV/AIDS, tuberculosis and malaria. Progress reports to the Global Fund secretariat were used as a basis to calculate results. Service delivery indicators for antiretrovirals (ARV) for HIV/AIDS, case detection under the DOTS strategy for tuberculosis (DOTS) and insecticide-treated nets (ITNs) for malaria prevention were selected to estimate programmatic contributions to international targets for the three diseases. Targets of Global Fund-supported programmes were projected based on proposals for Rounds 1 to 4 and compared to international targets for 2009.

**Findings** Results for Global Fund-supported programmes total 544 000 people on ARV, 1.4 million on DOTS and 11.3 million for ITNs by June 2006. Global Fund-supported programmes contributed 18% of international ARV targets, 29% of DOTS targets and 9% of ITNs in sub-Saharan Africa by mid-2006. Existing Global Fund-supported programmes have agreed targets that are projected to account for 19% of the international target for ARV delivery expected for 2009, 28% of the international target for DOTS and 84% of ITN targets in sub-Saharan Africa.

**Conclusion** Global Fund-supported programmes have already contributed substantially to international targets by mid-2006, but there is a still significant gap. Considerably greater financial support is needed, particularly for HIV, in order to achieve international targets for 2009.


**Methods**

Present results and future targets for Global Fund-supported programmes were compared against international targets. Current results and targets for Global Fund-supported programmes also were compared. Results for Global Fund-supported programmes were reported from 333 grants in 127 countries and aggregated. Five-year targets and over time to assess progress towards the MDGs. To date, the results have been presented in relation to Global Fund-supported programme targets, but not to wider international goals. Based on a recent Global Fund progress update, this paper relates the Global Fund-supported programmes results to international targets as well as presenting a framework to further track progress against international targets.
Research

The Global Fund’s effects on Millennium Development Goals

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from the proposals approved for the Global Fund’s Proposal Rounds 1 to 4 (2002–2004) were aggregated to 2009. International targets for programmatic service delivery were taken from targets agreed-upon by major disease-fighting partners.

Results of programmes

Grantees periodically report their results to the Global Fund Secretariat as a basis for performance-based funding. Programmes choose indicators for which data may already be collected, generally from standard sets of indicators agreed upon by major partners.14 The indicators should reflect progress in the service delivery areas approved in the proposals. The Global Fund Secretariat asks grant recipients to include at least some selected service delivery indicators of people reached by services (known as the top ten indicators), such as the number of people treated on antiretrovirals (ARV), the number of new smear-positive TB cases detected under the DOTS strategy and the number of insecticide-treated nets (ITNs) distributed.14 The reported data are verified by local agents who act in countries on behalf of the Global Fund to ensure accountability (Table 1). The data are then compiled at the Secretariat (grantee-submitted reports are available at: http://www.theglobalfund.org). The indicators on the same service in a country were assessed for overlap, as different grants may separately report on the same service or report overlapping services in a country. For example, one indicator may report on the number of pregnant women on ARV and another on all adults on ARV. Some programmes report national figures due to the large amount and integrated nature of Global Fund support filling financial gaps in national programmes. In particular, national ARV figures are taken for countries where the support is essential for ARV treatment (laboratory/infrastructure support, training, drugs/commodities or management) on a national scale, the programme is performing well and raises no significant data quality issues, and significant financial resources contribute to the national effort (disbursement over US$ 10 million). ARV figures are also verified with other major donors to assess consistency and overlap supported usually by the Global Fund and an aid programme sponsored by the United States of America, the President’s Emergency Plan for AIDS Relief (PEPFAR).15,16

Targets of Global Fund-supported programmes

The targets of Global Fund-supported programmes were projected based on the presently approved and agreed-upon proposals, from Round 1 to Round 4. Proposals are made for five years, with a few exceptions. The targets regarding ARV, DOTS, and ITNs were extracted from board-approved proposals. All approved proposals are available on the Global Fund web site (http://www.theglobalfund.org). Proposals are funded only for the initial two years, and the remaining years are contingent on adequate performance; this analysis included all years of proposal lifetime. As of May 2006, 5 out of 140 grants were recommended by the Secretariat to be discontinued for Phase 2 funding. The timing of the start of programmes also was taken into consideration, as it took 11 months on average from proposal approvals to sign grant agreements and initiate funding disbursement. The targets are presented as cumulative until the end of 2009. It is not the Global Fund Secretariat that decides the targets; the country sets targets based on the targets it sets for its programmes, which may include inputs from the country and other donors.

International targets for ARV

As the MDGs were decided before the global ARV scale-up era, they do not include ARV. This scale-up is an indicator set by the United Nations General Assembly Special Session on HIV/AIDS, a key international goal. By 2005, the “3 by 5” initiative led by WHO and UNAIDS provided the major international target for ARV scale-up. This initiative resulted in a level of ARV scale-up which was not considered possible before the initiative started in 2003, but met only half of the international target.15 For the future target from 2006 to 2009, we used the projected number of people on ARV considered for the UNAIDS resource estimates in 2005.1 This is estimated to reach 9.8 million people on ARV by 2010 and to cover 68% of ARV needs, defined as people living with HIV two years before death.

International targets for DOTS

The internationally publicized targets for TB control are to detect 70% of new sputum smear-positive cases and to treat 85% successfully under DOTS programmes. WHO estimated 3.9 million new smear-positive TB cases occurred and a case detection rate of 53% as of 2004;1 these were used as the 2004 targets. For the 2005 targets, the case detection rate was set at 70% and 3.9 million new smear-positive TB cases were assumed. These numbers include high-income countries, but no adjustment was made since cases from these countries are relatively few in number. From 2006 to 2009, the number needed for each year was calculated based on the target numbers of new smear-positive TB patients treated for 2006 and 2010 published in The global plan to stop TB, 2006–2015.17 The estimated international targets were accumulated since

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ARV, people on antiretroviral treatment; M&E, monitoring and evaluation.

* This is being piloted and rolled out.
mid-2004 to be comparable to targets and results for Global Fund-supported programmes.

**International targets for ITNs**
The Abuja target, set by the African Summit on Roll Back Malaria in 2000, calls for protecting 60% of populations at high risk for malaria, namely children under 5 years of age and pregnant women, with ITNs in sub-Saharan Africa. Assuming that one ITN is needed to protect one high-risk person (this is a conservative estimate, as an ITN is often used to cover one mother and one child), the number of ITNs needed to cover 60% of the population living in malaria risk areas was calculated. The at-risk population was estimated for WHO deriving from the MARA map exercise. This country-specific information was extrapolated using population projections and aggregated for three sub-Saharan African regions covered by Global Fund grants. Accordingly, Global Fund targets and results on ITNs were presented only for sub-Saharan African regions in comparison with international targets. Re-treatment for insecticide and replacement of worn-out nets were not considered.

**Results**
A comparison of Global Fund-supported results to international targets is shown in Table 2. Aggregated results from Global Fund-supported programmes reached 544 000 people for ARV, 1.4 million for DOTS and 11.3 million for ITNs by June 2006, an increase from 384 000 people on ARV, 1 million for DOTS, and 7.7 million for ITNs by 2005. ITNs for sub-Saharan Africa numbered 5.1 million by 2005 and 6.3 million by mid-2006. International targets for ARV were 3 million by the end of 2005 (the “3 by 5” target); ARV delivered by Global Fund-supported programmes contributed 13% of the “3 by 5” target, which was 29% of actual global results of 1.3 million people on ARV. Cumulative estimates for DOTS treatment were 3.8 million by the end of 2005; the share of this provided by Global Fund-supported programmes was estimated at 26% of the international target by 2005, and 29% by mid-2006. In addition, international ITN targets were estimated for sub-Saharan Africa at 69 million ITNs by the end of 2005, and the contribution by Global Fund-supported programmes was 7% of the estimated international target for 2005 in sub-Saharan Africa and 9% by mid-2006.

Global Fund-supported programme targets by 2009 were to provide 1.6 million people with ARV therapy and 3.5 million people with DOTS treatment, and to deliver 100 million ITNs (Table 2). International targets for ARV were calculated as 8.3 million people on ARV out of an estimated international 12.4 million people needing treatment in 2009. Global Fund-supported programmes aimed to deliver 19% of this 2009 international target. International cumulative targets estimated for DOTS were 12.3 million in 2009. The proposed targets for Global Fund-supported programmes aim to contribute 28% of the international target by 2009. International ITN targets were estimated for sub-Saharan Africa at 76 million ITNs by 2009. The aggregated targets for Global Fund-supported programmes in the sub-Saharan African region were 64 million ITNs, or 84% of the international target, by 2009. This shows that the targets of programmes supported by the Global Fund should contribute significantly towards an impact on malaria. If one ITN covers more than one person, the actual coverage would be higher, but this target does not account for needs to re-treat ITNs once the insecticide loses its effectiveness or to replace worn-out nets.

Global Fund-supported programmes also show progress in reaching targets set by countries (Fig. 1). These targets by Global Fund-supported programmes were set at 350 000 people on ARV, 700 000 receiving DOTS therapy and 5 million ITNs by the end of 2005. The corresponding results reported by these programmes totalled 384 000 people on ARV, 1 million receiving DOTS treatment and 7.7 million ITNs. By June 2006, these figures increased 42%
for ARV (544 000), 43% for DOTS (1.4 million) and 47% for ITNs (11.3 million).

Discussion

HIV, TB and malaria result in an annual loss of well over five million lives and enormous burdens of illness and economic impacts on households, communities and countries. The achievement of international goals to control of HIV, TB and malaria by 2015 would result in approximately 50 million lives saved, based on calculations of 31.1 million HIV infections averted,20 14 million lives saved from TB and a total of 2.5–5 million direct malaria deaths averted by 2015 if mortality is halved by 2015 from a baseline of 1 million direct malaria deaths per year.21 Overall, Global Fund-supported programmes contribute substantially to international targets, but these require considerably greater financing and service delivery, particularly for HIV, to achieve international targets by 2015. By mid-2006, Global Fund-supported programmes contributed 18% of ARV targets, 29% of treatments needed to achieve the international target for DOTS, and 9% of ITN distribution needed to achieve international targets for malaria.

Data used in this exercise have inherent limitations. First, countries select indicators and set targets. Some grants use indicator definitions that are not perfectly consistent with other grants or are not standardized with international definitions. Second, future targets do not guarantee results, though the results so far have reached grant targets overall.3 Third, despite safeguards installed to verify reported results and extensive analytical exercises to validate and cross-check indicators, errors might still take place. A preliminary analysis of on-site data quality verification showed that 70% of indicators were within a 10% error margin, and that errors were not biased in one direction with both over- and under-reporting.22 Uncertainty ranges around data have not been assessed to date. Importantly, the results and targets are due to country programmes and efforts, where the Global Fund provides financing alongside other donors. Global Fund financing, due to its gap-filling nature, is an integral part of country programmes supported by several sources. Finally, international targets need to be updated as new targets are agreed upon or operationalized. Despite these limitations, the analysis presented herein is the best estimate currently available, and provides a first assessment of the programmatic output of Global Fund-supported programmes against international targets.

Global Fund-supported programmes have provided substantial contributions to ARV treatment for the “3 by 5” target. Programmes have also demonstrated the effectiveness of country-driven targets, as overall grant-financed programme targets for ARV treatment have been reached. Global Fund-supported programmes contributed 29% of global results of 1.3 million people on ARV for “3 by 5” but only 19% is targeted by 2009. We have the opportunity to save millions of lives through future investments in effective prevention measures; such investments should lead to substantial savings by reducing the future number of people needing AIDS treatment. Between 2005 and 2015, it is estimated that 31.1 million HIV infections could be averted globally if an effective package of prevention, testing and treatment activities is funded and implemented.23 Further analysis regarding prevention efforts is needed to assess contributions towards the MDGs.

The international targets for TB control are to achieve a 70% case detection rate in all high-burden countries and an 85% rate of successful treatment by scaling up quality programmes under DOTS; these interim targets seek to halt increases in and begin to reverse burdens by 2015.24-25 Globally, 1.7 million new smear-positive cases of TB were provided with treatment under the DOTS strategy in 2003.25 Global Fund-supported programmes reported a 29% contribution to international increases in case detection to date. By 2009, 28% of cumulative treatment is projected to be provided by Global Fund-supported programmes; almost 41% of the target for TB treatment will be provided by Global Fund-supported programmes in the year 2009. Once fully implemented, the Global Plan to Stop TB is expected to provide treatment to 50 million people in the next decade and, overall, to save 14 million lives. The HIV pandemic has caused a significant negative impact on TB control, particularly in sub-Saharan Africa. Unless efforts to control the HIV and TB epidemics are...
Résumé

Contribution des programmes financés par le Fonds mondial contre le SIDA, la tuberculose et le paludisme à la réalisation des objectifs internationaux et de ceux du Millénaire pour le développement : analyse initiale

Objectif Le Fonds mondial contre le SIDA, la tuberculose et le paludisme est l’une des principales sources de financement de la lutte contre ces maladies. Le présent article évalue, à partir de données tirées des attributions de subventions par le Fonds, la contribution des programmes que cet organisme finance à la réalisation des objectifs internationaux et des objectifs du Millénaire pour le développement.

Méthodologie Les données concernant les 333 subventions, bénéficiant à 127 pays, financées jusqu’en juin 2006 par le Fonds ont été agrégées et comparées aux objectifs internationaux relatifs au VIH/sida, à la tuberculose et au paludisme. Les rapports d’activité adressés au secrétariat du Fonds mondial ont été utilisés comme base pour déterminer les résultats des programmes. Des indicateurs mesurant la prestation de services (délivrance d’antirétroviraux (ARV)) dans le cas du VIH/sida, la détection des cas dans le cadre de la stratégie DOTS contre la tuberculose et l’équipement en moustiquaires imprégnées d’insecticide (MEI) dans la prévention du paludisme) ont été sélectionnés pour estimer les contributions programmatiques aux objectifs internationaux pour ces trois maladies. Des projections des objectifs des programmes financés par le Fonds mondial ont été établies à partir des propositions examinées dans le cadre des séries 1 et 2 de soumissions de propositions et comparées aux objectifs internationaux pour 2009.

Résultats Au total, en juin 2006, les programmes financés par le Fonds mondial ont permis de fournir des ARV à 544 000 personnes et de faire bénéficier 1,4 millions d’autres de la stratégie DOTS et 11,3 d’autres encore de moustiquaires imprégnées d’insecticide. Ces programmes ont contribué pour 18 % à la réalisation des objectifs internationaux relatifs aux ARV, pour 29 % à celle des objectifs DOTS et pour 9 % à celle des objectifs relatifs aux moustiquaires imprégnées d’insecticide en Afrique sub-saharienne pour mi-2006. Les programmes financés par le Fonds existants ont des objectifs en accord avec ces chiffres, qui, projetés, représentent environ 19 %...
Resumen
Contribución de los programas apoyados por el Fondo Mundial a las metas internacionales y los Objetivos de Desarrollo del Milenio: un primer análisis

Objetivo El Fondo Mundial de Lucha contra el SIDA, la Tuberculosis y la Malaria es uno de los mayores financiadores de la lucha contra esas enfermedades. En este artículo se examina la contribución de los programas apoyados por el Fondo Mundial al logro de las metas internacionales y los Objetivos de Desarrollo del Milenio, empleando datos de las subvenciones concedidas por dicho Fondo.

Métodos Se procedió a agregar los resultados logrados hasta junio de 2006 mediante 333 subvenciones apoyadas por el Fondo Mundial en 127 países, para compararlos con las metas internacionales en materia de VIH/SIDA, tuberculosis y malaria. Los informes sobre los progresos realizados enviados a la secretaría del Fondo Mundial se usaron como base para calcular los resultados. Se seleccionaron indicadores de prestación de servicios relacionados con la administración de antirretrovirales (ARV) contra el VIH/SIDA, la detección de casos en el marco de la estrategia DOTS para la tuberculosis y el uso de mosquiteros tratados con insecticida (MTI) para prevenir la malaria a fin de estimar las contribuciones progresivas a las metas internacionales establecidas para esas tres enfermedades. Además, se proyectaron las metas de los programas apoyados por el Fondo Mundial considerando las propuestas presentadas en las rondas 1 a 4, comparándolas con las metas internacionales para 2009.

Resultados Los resultados de los programas apoyados por el Fondo Mundial totalizan 544 000 personas sometidas a ARV, 1,4 millones tratadas con DOTS y 11,3 millones protegidas por MTI a junio de 2006. Los programas apoyados por el Fondo Mundial habían contribuido así al 18% de las metas internacionales fijadas para el tratamiento ARV, el 29% de las metas relacionadas con el DOTS y el 9% de los MTI en el África subsahariana a mediados de 2006. Los programas actualmente apoyados por el Fondo Mundial han acordado metas que según se calculan representarán un 19% de la meta internacional para la administración de ARV prevista para 2009, el 28% de la meta internacional fijada para el DOTS y el 84% de la meta de MTI en el África subsahariana.

Conclusión A mediados de 2006 los programas apoyados por el Fondo Mundial habían contribuido ya sustancialmente a propiciar las metas internacionales, pero sigue habiendo un importante desfase. A fin de alcanzar las metas internacionales fijadas para 2009, se necesita un apoyo financiero considerablemente mayor, en particular contra el VIH.
References