

## Viewpoint

# Health systems strengthening through insurance subsidies: the GFATM experience in Rwanda

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## Summary

The Global Fund Against AIDS, Tuberculosis and Malaria (GFATM) approved only three ‘health systems strengthening’ projects ever, one of them in Rwanda. This project intends to enhance financial access to health care by subsidising health insurance for the poor in order to combat the three diseases successfully. It was submitted to a mid-term evaluation in 2007. The findings of this evaluation are presented and triangulated with experience gained through several years of membership in the Rwandan Country Coordinating Mechanism and the multi-stakeholder ‘Working Group on *Mutuelles*’: The GFATM-funded project improved dramatically the financial access of its target group, the very poor – reaching approximately one Rwandan in six. Because of the established rigid regulatory framework, its impact on other population strata was more ambiguous. Improved financial access went hand-in-hand with growing health service utilisation and improvements in the population’s health status, including better control of AIDS, tuberculosis and malaria. This success was achieved with limited financial resources. In consequence, interventions that strengthen health systems should always be considered for a prominent – if not a priority role – in GFATM-funded projects.

**keywords** financial access, mutual health insurance, social health insurance, insurance subsidies, Global Fund, Rwanda, Africa

## Introduction

Social health insurance or community-based health insurance is increasingly recommended as a useful additional tool for health financing (Bennett 2004). As ‘financing’ is understood as one of the ‘building blocks’ of a health system (WHO 2007), health insurance is thus supposed to be able to strengthen health systems. Although encouraging case studies describe the possible benefits of such schemes (van Ginneken 1999), various reviews (ILO 2002; Ekman 2004) challenge the lack of evidence concerning their impact as far as the quality of care, and the target population’s health status is concerned. Furthermore, their ability to cover the population working in the informal sector (Waelkens & Criel 2004) as well as the ability to improve cost-recovery (Gottret & Schieber 2006) is consistently questioned. Some factors seem to strengthen the performance of insurance schemes, such as professional and autonomous management of the schemes (Baltussen *et al.* 2008), providing subsidies for the poor (ILO 2005;

Kalk 2008), introducing linkages with the formal sector (Arhin-Tenkorang 2001) and establishing a reinsurance system (Arhin-Tenkorang 2001).

In Rwanda, community-based or mutual health insurance schemes within the informal sector (commonly labelled *mutuelles*) enjoyed a certain and steady growth from 1999 onwards (Schneider & Diop 2004). In 2005, the Country Coordinating Mechanism (CCM) for Global Fund Against AIDS, Tuberculosis and Malaria (GFATM)-funded projects submitted successfully a project envisaging health insurance subsidies for the poor to the Global Fund in Geneva (CCM Rwanda 2005). It became one of only three ‘Health System Strengthening’ projects ever approved by GFATM (the other ones being located in Lao PDR and Malawi). Its rationale was based on the need to improve financial access to quality care to combat AIDS, tuberculosis and malaria comprehensively.

Funds made available come close to US Dollar (USD) 34 million for 5 years from January 2006. This financial boost and the elaboration of a corresponding administrative

framework by the Rwandan authorities accelerated the progress of the *mutuelles* scheme in the country considerably. It is argued that ‘*mutuelles* coverage’ in Rwanda rose to levels as high as 73% in 2006 (Logie *et al.* 2008) – an outstanding figure for a sub-Saharan country with an extremely low income and a large percentage of people living in accentuated poverty and working in the informal sector.

The following observations are based on the mid-term review of this project (Kalavakonda *et al.* 2001), on regular participation in the Rwandan CCM from 2003 onwards, and on the experience made as Chair of the Rwandan ‘Working Group on *Mutuelles*’ (affiliated to the Health Sector Coordination Group) since its creation early in 2005.

### Effects of GFATM funding

First, the National Health Expenditure (THE) in Rwanda demonstrated a considerable increase: In 2006, it doubled in comparison with 2003, and it tripled (in real terms!) in comparison with 2002 (Ministry of Health 2008). This increase was mainly financed by development partners, while the share of the Rwandan Government (GoR) to THE declined. Principal sources of additional funding were the US Government (through the President’s Emergency Plan for AIDS Relief) and the GFATM. A reasonable part of these funds went directly and indirectly into salaries: In 2007, a nurse in the public sector earned approximately USD 300 per month, *vs.* USD 30 in 2003 (Kalk *et al.* 2005; Ministry of Public Service and Labour 2008). Salaries in certain projects funded by development partners went still further beyond these thresholds.

The *mutuelles* scheme did not contribute significantly: In 2006, THE came to an amount of USD 307 million, *i.e.* USD 34 per capita. Of this sum, 53% were provided by development partners, 19% by the GoR and 26% by private households. The contribution of households occurred mainly out-of-pocket, the *mutuelles* scheme had a share of 5% of THE. The percentage of GoR’s budget allocated to health dropped to 6.5% from 9% in 2003. This picture of the Rwandan health sector corresponds to its overall aid dependency: official development assistance is more or less equal to a quarter of gross domestic product over the last years.

Secondly and simultaneously, key indicators depicting the population’s health status improved, *e.g.* the under five mortality fell from 196/1000 to 152/1000 over a 5-year period (National Institute of Statistics in Rwanda *et al.* 2007). HIV seroprevalence was determined at 3.1% amongst adults, a value below the expectations. The TB treatment completion rate rose from 58% in 2002 to 85% in 2006.

Thirdly, it is likely that the increased insurance coverage (from 44% in 2005 to over 70% of the entire population in mid-2007), and thus the GFATM support played a key role at least in increasing the health service utilisation rate (from 0.4 health centre visits per person and year in 2005 to 0.5 visits in 2007): After the approval of the GFATM-funded project, the membership in any kind of ‘health insurance’ was made compulsory for every Rwandan citizen. For those not insured through the formal sector, *mutuelles* provide the only option to access the system. For 1.57 million very poor Rwandans, the membership fee of USD 2 was entirely subsidised by the GFATM. It is supposed to cover the ‘minimal activity package’, essentially treatment at health centre level. For 1.35 million Rwandans in this group, an additional amount of USD 2 per person was channelled to the district to cover health care at secondary level (*i.e.* district hospitals), the so-called ‘complementary activity package’. Altogether, the project subsidised the *mutuelles* scheme for the poorest 16% of all Rwandans. It seems plausible that such progress and the resulting increase in health service utilisation contributed to the observed improvements in the population’s health status.

Nonetheless, the established *mutuelles* scheme and in consequence the GFATM-funded project is characterised by certain systemic weaknesses: The disproportion between people receiving subsidies and people in need of them is probably the most challenging one. Whilst 57% of Rwandans are considered as poor and 37% as extremely poor (McKay *et al.* 2007), only 16% receive a subsidy from the project.

In addition, available data suggest (Schmidt *et al.* 2006) that the compulsory contribution of USD 2 per year (per person, not per household) causes considerable financial hardship for a considerable minority of the population, the more as the fixed collection day in January is disconnected from harvest – the principal source of revenues in rural Rwanda.

For those insured on their own account, the established co-payment of approximately USD 0.30 at health centre level does not seem to represent a major financial hurdle. In contrast, the co-payment of 10% of the treatment fee required at hospitals is beyond the financial reach of a substantial proportion of them.

Remarkably, more than a quarter of the population ignores the obligation to join insurance. They thus are a group without any regulated right to access health services and might become subject to discrimination. These limitations and the impact of the system on the different population strata are summarised in Table 1.

Furthermore, the flat premium introduced for everyone does not only disregard the ability to pay of poorer

**Table 1** Changes in financial access to health care according to population strata and health care level

Population group	Estimated size	GFATM support	Access to care at health centre level	Access to care at district hospital level
Non-insured	1.8 million	No direct support	Hampered by irregular status and arbitrary treatment fees	Hampered by irregular status and arbitrary treatment fees
Subsidised extremely poor, orphans, PLWHA	1.6 million	Subsidised <i>mutuelles</i> membership, (for 1.3 million) hospital co-payment	Dramatically improved (if not assured)	Improved respectively assured if co-payment of 10% is paid by district
Poorer <i>mutuelles</i> members	1.9 million	No direct support	Improved at the price of financial hardship	Seriously limited by co-payment
Wealthier <i>mutuelles</i> members	2.8 million	No direct support	Improved	Improved
People insured by other mechanisms†	1.2 million	No direct support	Basically assured by health insurance	Basically assured by health insurance (though not always applicable)

GFATM, Global Fund Against AIDS, Tuberculosis and Malaria.

†Employment, actual and former defence force members, prisoners, etc.

population strata, but equally the real costs of a reasonable treatment package. As its share to THE does barely exceeds 5%, the vast majority of health services are financed by other sources. This fact limits both its contribution to the alleviation of poverty and to the mobilisation of finances for health.

In addition, management and administration of the *mutuelles* scheme are more ‘parastatal’ than autonomous, let alone community based. Most key functions are assured by civil servants at district and health centre level under direct control of the Ministry of Health (MoH 2006). At health centre level, the involvement of health workers in the administration blurs the envisaged separation of service purchasers and service providers. These observations are underpinned by the fact that all financial contributions to the *mutuelles* scheme (be it membership fees or subsidies) flow through the governmental accountancy system. Because of these features, the scheme rather resembles a flat fee tax for health than a proper insurance system.

Finally, the insufficient number of health staff, the lack of staff responsible for the administration of the *mutuelles* at all levels and the low level of training in administrative issues hampered seriously the functioning of the system. The fact that a small group of only six people was responsible for managing the system at national level and had to supervise health insurance for about 6 million beneficiaries speaks for itself.

In summary, the project’s impact on financial access to health care varied between population strata (according to their wealth) and between health care level. Basically, it improved the access to health services at primary care level for a large minority of extremely poor people. It is quite likely that this phenomenon played an important

role in increasing health service consumption, and it still plausible that it contributed to the rapid improvement of the population’s health status. As the monitored indicators are closely related to GFATM’s three target diseases, it can be postulated that the project – with limited financial resources – reinforced both equity in access as the health system’s responsiveness to AIDS, tuberculosis and malaria.

Further analysis is required to determine financial resources and managerial modifications required to address the systemic weaknesses identified. It can be anticipated that well-tailored subsidies covering all in need and including all health care levels will be quite substantial in comparison with those made available so far. The benefits of such an intervention must be balanced against these costs as against benefits to be expected from other interventions (e.g. direct payment and thus ‘free’ provision of drugs or services without the involvement of an insurance-like structure). The degree of autonomy and community participation conceded to the *mutuelles* will depend on political decisions of the future. Independently from these challenges, the experience gained tells a story of an intervention which rapidly improved equity of and access to health services with limited resources. As equity and access are widely recognised as two dimensions and as pillars of quality, this experience speaks in favour of attributing a prominent – if not a priority – role to health systems strengthening within GFATM-funded projects.

The success depicted here is still to be compared with the progress achieved through and with the efficiency of other – more disease-oriented – projects financed by GFATM. In the context of such a comparison, it might become a strong argument for broadening the Fund’s mandate and for

subsequently transforming it into a 'Global Fund for International Health Promotion'.

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### References

- Arhin-Tenkorang D (2001) *Health Insurance for the Informal Sector in Africa: Design Features, Risk Protection, and Resource Mobilization*. Commission on Macroeconomics and Health Working Paper Series, Paper No. WG3, 1.
- Baltussen R, Bruce E, Rhodes G, Narh-Bana SA & Angyepong I (2008) Management of mutual health organizations in Ghana. *Tropical Medicine and International Health* **11**, 654–659.
- Bennett S (2004) The role of community-based health insurance within the health care financing system: a framework for analysis. *Health Policy and Planning* **19**, 147–158.
- Country Coordinating Mechanism (CCM) Rwanda (2005) *Assuring Access to Quality Care: the Missing Link to Combat AIDS, Tuberculosis and Malaria*. CCM Rwanda, Kigali. Accessed 19 Aug 2008 at: <http://www.theglobalfund.org/programs/grantdetails.aspx?compid=1199&grantid=439&lang=en&CountryId=RWN>.
- Ekman B (2004) Community based health insurance in low-income countries: a systematic review of the evidence. *Health Policy and Planning* **19**, 249–270.
- van Ginneken W (ed.) (1999) *Social Security for the Excluded Majority. Case Studies of Developing Countries*. International Labour Organisation, Geneva.
- Gottret P & Schieber G (2006) *Health Financing Revisited: A Practitioner's Guide*. The World Bank, Washington, DC.
- International Labour Organisation (2005) *Improving Social Protection for the Poor: Health Insurance in Ghana – The Ghana Social Trust pre-Pilot Project*. ILO, Geneva.
- International Labour Organization (2002) *Extending Social Protection in Health Through Community-Based Health Organizations: Evidence and Challenges*. (Discussion paper). ILO, Geneva.
- Kalavakonda V, Groos N & Karasi JC (2007) *Mid-Term Evaluation of the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria 5th Round Project on Health Systems Strengthening: Assuring Access to Quality Care – The Missing Link to Combat AIDS, Tuberculosis and Malaria in Rwanda*. Accessed 24 September 2008 under: <http://www.ilo.org/gimi/RessShowResource.do?ressourceId=4836>.
- Kalk A (2008) Health insurance in sub-Saharan Africa: a call for subsidies. *Bulletin of the World Health Organization* **86**, B.
- Kalk A, Mayindo JK, Musango L & Foulon G (2005) Paying for health in two Rwandan provinces: financial flows and flaws. *Tropical Medicine and International Health* **10**, 872–878.
- Logie DE, Rowson M & Ndagije F (2008) Innovations in Rwanda's health system: looking to the future. *Lancet* **372**, 256–261.
- McKay A, Strode M, O'Brien C & Greenwell G (2007) *EICV Poverty Analysis for Rwanda's Economic Development and Poverty Reduction Strategy*. Oxford Policy Management, Oxford.
- Ministry of Health (2006) *Instruction Ministerielle No. 20/15 du 04/04/2006 Portant Attributions des Instances Administratives des Mutuelles de Santé au Rwanda*. Ministry of Health, Kigali.
- Ministry of Public Service and Labour (2008) *MIFOTRA 2008 MOH Pay Scale*. Ministry of Public Service and Labour, Kigali.
- Ministry of Health, Rwanda (2008) *Full Rwanda 2006 National Health Account Report*. Ministry of Health, Kigali.
- National Institute of Statistics in Rwanda (2007) *Quarterly Economic Review*. Accessed August 2007 under: <http://www.statistics.gov.rw>.
- National Institute of Statistics in Rwanda, Commission Nationale de Lutte Contre le Sida, Centre de Traitement et de Recherche sur le Sida, ORC Macro (2007) *Enquête Démographique et de Santé 2005*. National Institute of Statistics in Rwanda, Kigali & Calverton.
- Schmidt JO, Kagubare J & Kalk A (2006) Thresholds for health insurance in Rwanda: who should pay how much? *Tropical Medicine and International Health* **11**, 1327–1333.
- Schneider P & Diop F (2004) Community-based health insurance in Rwanda. In: *Health Financing for Poor People* (ed. FS Preker & G Carrin) The World Bank, Washington, DC, pp. 251–274.
- Waelkens MP & Criel B (2004) *Les Mutuelles de Santé en Afrique Sub-Saharienne*. The World Bank, Washington, DC.
- World Health Organization (WHO) (2007) *Health Systems: Everybody's Business*. WHO, Geneva.

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