



Royal Tropical Institute
KIT Development Policy & Practice



THE IMPACT OF HIV AND AIDS FUNDING AND PROGRAMMING ON HEALTH SYSTEM STRENGTHENING IN GHANA

Health System Research Series No. 3

October 2011



Adjei S, Nazzar A, Seddoh A, Blok L, Plummer D.

Royal Tropical Institute / Koninklijk Instituut voor de Tropen (KIT) Development Policy & Practice

The Health System Research Series of the Royal Tropical Institute (KIT) presents key findings on current themes in international health system research to a multi-disciplinary forum of policy makers, scientists, and management and development advisors conducting international health and system research.

The Royal Tropical Institute (Koninklijk Instituut Voor de Tropen) in Amsterdam, the Netherlands, is an international institute, which specializes in the generation and sharing of knowledge and expertise through institutional cooperation. The objectives of KIT are to contribute to sustainable development to reduce poverty, preserve encourage the exchange of culture diversity and disseminate this information to further these goals.

This Health System Research Series report was produced under the direction of:
Jenniskens F, Oosterhoff P, Tiendrebeogo G, Wolmarans L.

Royal Tropical Institute / Koninklijk Instituut voor de Tropen (KIT)
KIT Development, Policy and Practice
PO Box 95001, 1090 HA Amsterdam, Pays-Bas
Website: www.kit.nl

Text Edited by:
Martha Ann Overland

Design:
Sietse Bras, Dutch Portfolio

Partner organizations for this publication:
Center for Health and Social Services, Ghana
Royal Tropical Institute (KIT), Amsterdam

Co-investigators:
Fuseini Satara, Center for Health and Social Services, Ghana
Elvis Akpabli, Center for Health and Social Services, Ghana
Benedicta Bentum, Center for Health and Social Services, Ghana
Senu Nyanyovor, Center for Health and Social Services, Ghana

Suggested citation:
Adjei S., Nazzar A., Seddoh A., Blok L., Plummer D. (2011). The Impact of HIV and AIDS Funding and Programming on Health System Strengthening in Ghana. Health System Research Series No. 3. Edited by Jenniskens F, Oosterhoff P., Tiendrebeogo G., Wolmarans L. Royal Tropical Institute (KIT), Amsterdam, 2011.

Copyright 2011:
KIT, Amsterdam, Pays-Bas KIT, Amsterdam, Pays-Bas

Acknowledgements

Funding for this case study was generously provided by the Netherlands Ministry of Foreign Affairs, the STOP AIDS NOW partnership in the Netherlands (ICCO, Hivos, Cordaid, Oxfam-Novib and Aids Fonds), Cordaid and the Global Fund to Fight Aids TB and Malaria (GFATM).

We are grateful to Ghana's Ministry of Health (MoH), especially Mr. Emmanuel Owusu-Ansah, the point person for the study, for his tremendous support. We would also like to thank the Ghana Health Service for its support through the National AIDS Control Programme, and representative Dr. Stephen Addo and Deputy Director for Policy, Dr. Carolyn Jehu-Appiah.

We are grateful to the research team, which included Dr. Diana Baah-Odoom, who conducted the desk review; Mr. Dan Osei for his financial analysis; and Dr. Edith Tetteh, Mrs. Mercy Abbey and Mrs. Edith Wellington, the team's social scientists. We also acknowledge the contribution of the research advisory committee whose insights helped guide this work. Many people have contributed to this study. We wish to thank all the data collectors and the people who helped with transcriptions and coding of the interviews. A special word of thanks goes to Thyra de Jongh for scientific contributions, to Caroline Grillot and Christel Jansen for additional research and language and to Bart Vreeken for additional formatting. Many thanks go to all the health professionals and community members who gave their valuable time to be interviewed and thus contributed towards the successful completion of this work.

Table of Content

Table of Content	iii
Acronyms and abbreviations	iv
Preface	v
Synthesis of the multiple country study results	vi
Key results and discussion Ghana	xiv
Ghana Case study	
1. Background to the Ghana Case study	1
1.1 Country context	1
1.2 General health profile	1
1.3 Overview of the health sector	5
1.4 The HIV and AIDS response in Ghana	8
2. Research Objectives	11
3. Methodology	12
4. Results	13
4.1 Alignment of (real and perceived) priority health needs, demands and supply	13
4.2 Interaction between the HIV and AIDS response and the health system	14
5. Discussion	23
6. Conclusion	26
7. Policy implications and emerging issues	27
Annex	28
References	29
<i>Figures and tables:</i>	
<i>Figure 1: The HIV prevalence, health expenditures and AIDS budgets of five sub-Saharan African countries that participated in the study.</i>	vii
<i>Figure 2: Sampling framework within the countries</i>	ix
<i>Figure 3: Map of Ghana</i>	1
<i>Figure 4: Maternal mortality ratio (surveys), recent and projected</i>	2
<i>Figure 5: Institutional Structure of Ghanaian public health services</i>	5
<i>Figure 6: Ghana health expenditure as a proportion of GDP</i>	7
<i>Figure 7: External resources for health as a percentage of total health expenditure</i>	7
<i>Figure 8: Proportion of HIV sero-positive individuals among people who participated in counselling and testing (CT) and PMTCT activities, 2007 - 2009</i>	8
<i>Figure 9: Global Fund contributions to HIV and AIDS financing in Ghana: 2002 - 2010</i>	10
<i>Table 1: Number and interviews per country</i>	ix
<i>Table 2: Top ten reasons for visits to outpatient departments in Ghana, 2009</i>	3
<i>Table 3: Selected national indicators</i>	4
<i>Table 4: Summary of selected donor funding 2002–2006</i>	7
<i>Table 5: Total Spending on Key Priorities or Intervention Areas, 2007</i>	9
<i>Table 6: Overview of selected communities</i>	28
<i>Table 7: Profile of district and national level respondents</i>	28
<i>Table 8: Interview Session lengths</i>	28
<i>Table 9: Data collection timing</i>	28
<i>Table 10: Total Number of Interviews</i>	28

Acronyms and abbreviations

AIDS	Acquired Immune Deficiency Syndrome	MOH	Ministry Of Health
ART	Anti Retro-Viral Therapy/Treatment	MSMs	Men having Sex with Men
CSWs	Commercial Sex Workers	MOFEP	Ministry of Finance and Economic Planning
CHAG	Christian Health Association of Ghana	MDBs	Multi-Donor Budget Support
CT	Counseling and Testing	MDGs	Millennium Development Goals
CBOs	Community Based Organizations	MTHS	Medium Term Health Strategy
CSOs	Civil Society Organizations	NACP	National AIDS Control Program
CL	Community Level	NDPC	National Development Planning Commission
CM	Community Member	NHIS	National Health Insurance Scheme
CHPS	Community-based Health Planning and Services	NHIA	National Health Insurance Authority
DANIDA	Danish Development Association	NL	National Level
DFID	Department for International Development	NGO	Non Governmental Organization
DPs	Development Partners	NIA	National Identification Authority
DHS	District Health System	OPD	Out-Patient Department
DL	District Level	PoW	Programme of Work
DOTs	Directly Observed Treatment	PLHIV	People Living With HIV/AIDS
DHMT	District Health Management Team	PMTCT	Prevention of Mother to Child Transmission
FGD	Focus Group Discussion	PEPFAR	President's Emergency Plan for AIDS Relief
FHI	Family Health International	QPH	Quality Health Partners
GAC	Ghana AIDS Commission	KIT	Royal Tropical Institute
GHS	Ghana Health Service	RBM	Roll Back Malaria
GSS	Ghana Statistical Service	RH	Reproductive Health
GDHS	Ghana Demographic and Health Survey	RCH	Reproductive and Child Health
GHAFUND	Ghana AIDS Response Fund	STI	Sexually Transmitted Infections
GoG	Government of Ghana	SWAP	Sector Wide Approach
GFATM	Global Fund for AIDS, Tuberculosis and Malaria	SBS	Sector Budget Support
GAVI	Global Alliance for Vaccines and Immunizations	SHARP	Strengthening HIV/AIDS Response Partnerships
HIV	Human Immune Virus	SOPs	Standard Operating Procedures
HSMTDP	Health Sector Medium Term Development Plan	TFR	Total Fertility Rate
HSS	Health System Strengthening	TB	Tuberculosis
HRD	Human Resource Department	TBA	Traditional Birth Attendants
HW	Health Worker	UNAIDS	The Joint United Nations Program on HIV/AIDS
HIRD	High Impact Rapid Delivery	USAID	United States Agency for International Development
ITNs	Insecticide- Treated Bed-Nets	USG	United States Government
IGF	Internally Generated Funds	UNICEF	United Nation's Child Education Fund
LMS	Logistic Management System	UNFPA	United Nations Population Fund
KI	Key Informant	VRA	Volta River Authority
KBTH	Kole-Bu Teaching Hospital	WHO	World Health Organization

Preface

The call to improve the performance of African health systems has never been more urgent. Rapidly increased funding for HIV and AIDS has made significant changes for HIV and AIDS treatment and prevention. Today, the majority of people who receive antiretroviral treatment (ART) live in poor sub-Saharan African countries. The incidence of new HIV infections in the most affected regions has been reduced by 25%. But it has become evident that these gains cannot be sustained unless the wider health system is strengthened in parallel. Furthermore, in the countries hardest hit by the HIV epidemic, large numbers of people also face other health problems, such as maternal health conditions, malaria, respiratory infections, and diarrhea, for which limited or no care is available.

Health systems have a reputation for insatiable appetites for both money and human resources. In a time of global financial crisis, it is of particular importance to understand how disease-specific funding affects the capacity of health systems to respond to a variety of health needs. While policy makers within the priority disease programs discuss ways to strengthen the health system by making better use of available resources, critics argue that the approach chosen to fight HIV and AIDS has led to fragmentation of the wider health system, and that other important health needs have been neglected as a result.

The health systems research series is an urgent call to action to address the HIV-AIDS and the health systems crises in synergy. People and communities infected and affected by HIV and AIDS have many health needs that need an efficient response. A critical assessment of the impact of HIV and AIDS funding on health systems is needed to develop such a response. An effective response includes international and national development partners, donors, national-level governments and non-governmental bodies, district-level health managers, individual health workers and, last but not least, the men and women living in the communities infected and affected by HIV and AIDS. They must not be regarded as victims. They are, in many places, taking action to raise awareness and increase knowledge about the disease, expand access to services, and fight HIV-related stigma and gender discrimination.

The views and contributions of individuals at all these levels as presented in this series are critical for a better understanding of current gaps, and the results of the case studies contribute to formulating the need for further action. As long as the combined efforts of national policy makers, donors and advisors do not lead to empowering people and communities to improve their health, and as long as these efforts fail to build systems that allow all people to access the AIDS and other health services they need, we have not achieved our goals. Strategies to improve health access are pioneered every day on the ground, and it is of paramount importance to learn from these initiatives. As a global community we should not rest until international initiatives are effectively linked to the local context, to the realities of health providers and the communities they serve.

This report grows out of our shared belief that the world must respond to both the HIV and AIDS crisis and the health-system crisis. It highlights work that supports and energizes programmes that mitigate the double crisis. I believe this series can be a valuable advocacy and policy tool for addressing this complex challenge.

Marijke Wijnroks

Ambassador for HIV/AIDS and sexual health at the Ministry of Foreign Affairs, the Netherlands



Synthesis of the multiple country study results

Background of the study

In 2001, the United Nations declared HIV and AIDS an international crisis (United Nations, 2001). The HIV epidemic hit African countries that were already facing a multitude of problems including weak governance, conflicts and natural disasters.

That same year, the World Health Organization's Commission on Macroeconomics and Health and the UN's Commission on HIV/AIDS and Governance in Africa concluded that the lack of political will to sufficiently increase spending on health at sub-national, national and international levels was perhaps the most critical barrier to improving health in low-income countries (Sachs, 2001; The Commission on HIV/AIDS and Governance in Africa, 2001). It was clear, however, that removing financial constraints alone would not be sufficient to improve health outcomes and that progress also hinged on the ability of countries to increase the capacity of their health sectors. In particular, the human resource shortage in Africa, which was exacerbated by the effects of AIDS, constituted a barrier to universal and sustainable access to health services. Other weaknesses in the health system, such as poor infrastructure, the absence of sustainable supply systems, fragmented health information systems and weak governance structures, also needed to be addressed with short-, medium- and long-term perspectives.

The Millennium Development Goals, which were established in 2000, constituted a commitment to improve health and have led to an increased emphasis on addressing priority health needs, including HIV and AIDS. Since their inception, international spending for the fight against HIV/AIDS has increased dramatically (UNAIDS, 2010).

As a result, by the end of 2009, 5.25 million people worldwide were receiving antiretroviral treatment (ART); the majority - 3.9 million - live in poor sub-Saharan African countries. There has also been a 25% reduction in the incidence of new HIV infections in 22 sub-Saharan countries (UNAIDS, 2010). In spite of this achievement, the health systems in these countries can barely cope with increasing demands. The Millennium Development Goals (MDGs) and other international commitments such as the universal access to HIV prevention, treatment, care and support will not be met unless system-wide barriers are effectively addressed (Travis 2004).

Most HIV-positive people are now accessing treatment in parts of the world where large numbers of people have limited or no access to primary health care, nutritious food, clean drinking water and shelter (Tawfik & Kinoti, 2003). This has affected opportunities for the further scaling up of HIV and AIDS services and undermines the sustainability of achievements made to date. Given that HIV and AIDS will remain an important international public health issue for the next couple of decades, health systems in resource-poor settings will have to continue to simultaneously address HIV and AIDS and other health priorities.

Although there is a global consensus that there is a health system crisis, there is disagreement about how to deal with multiple burdens of disease in resource-poor settings. The continued struggle for scarce resources within the health sector has led to fierce debates among international health development experts around the question of how local health systems should respond to the additional threat posed by HIV and AIDS, and how investments in disease-specific programmes could contribute to wider health system strengthening.

Some critics argue that the largely vertical approach chosen to fight HIV and AIDS has been damaging and fragmented the wider health system, and that other important health needs have been neglected as a result. Other international policy makers point at the potential mutual benefits from investments made (England, 2009; WHO, 2009a).

In 2008, the World Health Organization (WHO) and the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) among others, brought together health systems policy makers and disease control experts to form the Maximising Positive Synergies Collaborative Group (WHO, 2008).

This resulted in a paper in *The Lancet* reviewing interactions between global health initiatives and country health systems. However, while the health policy makers from within health systems and disease control programmes tried to join forces to strengthen health systems, the question whether priority programmes could contribute to overall health system strengthening and, if so, how this could best be organized, remained unanswered (Biesma, 2009; WHO, 2009b).

The Royal Tropical Institute in Amsterdam decided in 2008 to initiate a multi-country study in order to examine the complex interactions between HIV programmes and larger national health systems. Case studies were implemented in collaboration with local research institutes in five African countries: Madagascar, Malawi, the Democratic Republic of the Congo (DRC), Burkina Faso and Ghana. The studies explored if and how HIV and AIDS programmes have contributed to strengthening the health systems of each country. We aimed to contribute to evidence-based policy and practise by examining the evidence and describing practical solutions to address health systems weaknesses that health practitioners, policy makers, community representatives and people living with HIV and AIDS (PLHIV) have developed within HIV and AIDS programmes.

Methodology

This was an exploratory study using a multi-country, multi-level descriptive case design. The study adopted a standardised data collection framework across countries that allowed for aggregation of data and meta-analysis. At the same time, the research teams were encouraged to zoom in on elements of specific interest in the respective case studies.

For the case studies, we used mixed methods by combining an analysis of epidemiological and financial data with key informant interviews and focus group discussions. We sought to obtain and compare opinions and perceptions from policy makers, health care providers, as well as beneficiaries. Respondents were selected from key stakeholders at the international, national, district and community level.

We used purposive sampling to select five countries in Africa with the aim to reach a maximum variation in terms of HIV prevalence, country context, robustness of the HIV response, the levels of investment in the health systems and other health sector characteristics. The willingness of national authorities to participate was essential.

Health systems are highly complex, consisting of different sub-systems, and composed of a great variety of stakeholders from the community level all the way to national policy makers. WHO defines them as follows: "A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health" (WHO, 2007). Numerous internal and external factors influence its functioning and effectiveness.

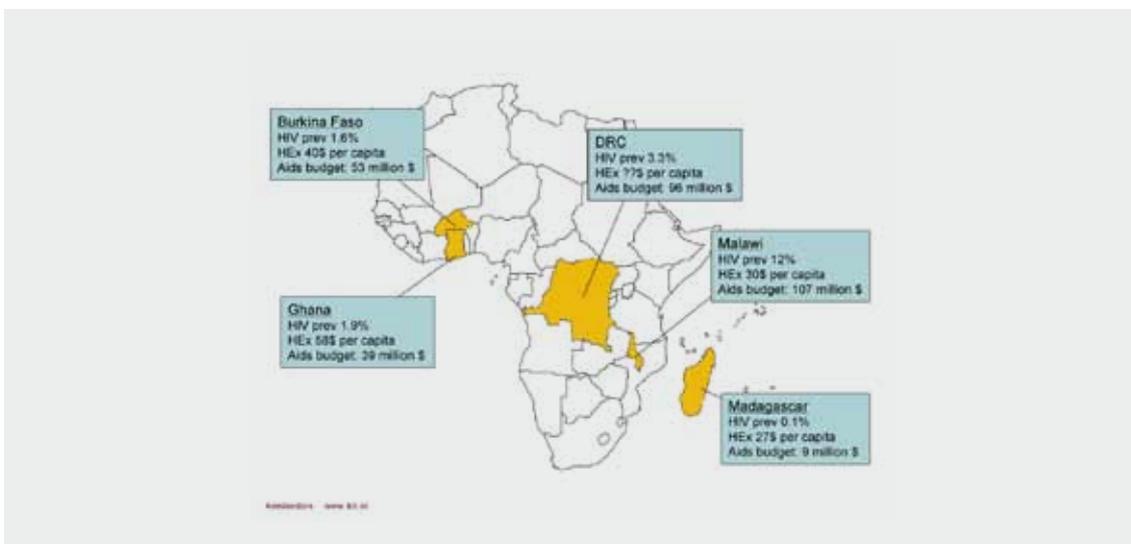


Figure 1 : The HIV prevalence, health expenditures and AIDS budgets of five sub-Saharan African countries that participated in the study.

In 2007, WHO published a conceptual framework to assist in developing and strengthening health systems, known as the “six building blocks” (WHO, 2007). Although different authors and research groups have commented on the shortcomings of this framework, no other commonly accepted framework had emerged at the time of our research (Marchal, 2009). Therefore the decision was made to loosely base our study on the WHO health systems framework.

Multidisciplinary teams of experienced researchers with medical and social science backgrounds from well-known research institutions in each country carried out the studies. Each research team was supported, as needed, by the staff of the Royal Tropical Institute during the different phases of the study.

Staff from the research institutions, health ministries and AIDS programs in the five participating countries took part in the study’s design phase during a five-day workshop in Amsterdam in 2008. In each country an inception workshop was organised, which included a workshop with multiple stakeholders to create in-country ownership and to receive input for the sampling of districts and selection of key informants and resources. During the inception workshop, the research teams were familiarized with the aims and objectives of the study and the research methodology. During the inception phase, the interview guides were pilot tested and adapted to the local context. The sampling framework for districts, communities and key informants were discussed and agreed upon. Once the data collection was completed, an analysis workshop was held in each country, followed by a multi-stakeholder meeting to validate the results.

Countries received continuing support by KIT staff through field visits and e-mail correspondence. At the end of the research period, researchers participated in a cross-country meta-analysis workshop to draw lessons from the other countries.

Data collection methods included:

- Desk reviews using check lists and standard formats for context analysis, secondary diseases trend analysis, and secondary analysis of financial resources for HIV and health system strengthening.
- Listing of key stakeholders
- Semi-structured interviews with key informants
- Focus group discussions

Within each country we sampled two districts allowing for maximum variation in the effectiveness of the HIV and AIDS responses and for maximum diversity in the health system (see figure 2). The selection was based on discussions during the multi-stakeholder meetings and focused on districts that were known to have examples of positive and/or negative interactions between the HIV and AIDS program and the larger health system. In each district we sampled a minimum of six health facilities and three communities, of which one community was the district capital, one in a rural setting but with relatively good access to health services, and one remote community with limited access to health services. Researchers conducted key informant interviews and held focus group discussions (FGDs) with women, men, and young people, and with health workers in each district.

Respondents at the national level included government policy makers and planners, development partners, and representatives of relevant line ministries and civil society organizations. At the district-level, health planners and health workers were interviewed, as well as development partners and representatives from civil society organizations and the private sector. At the community level, community leaders, community members and representatives of civil society organizations were interviewed through semi-structured interviews.

A total of 258 interviews and 45 FGDs were conducted in the five countries and given in the table below:

Number of interviews and FGDs per country						
	Burkina Faso	Ghana	Madagascar	DRC	Malawi	Total
National level – Government	14	10	5	8	22	59
National level – Non-government	2	2	1	2	8	15
Development Partner (national level)	7	4	6	2	9	28
District or provincial level (includes Government and Non-Government)	10	12	7	6	16	51
Health workers	21	10	8	11	13	63
Community leaders & community members	7	24	5	0	6	42
Focus Group Discussions	18	13	5	2	7	45
Total	79	75	37	31	81	303
258 individual interviews and 45 focus groups						

Table 1 : Number and interviews per country

The combination of research instruments allowed investigators to explore answers to key research questions. For example, interviewers asked about perceived health needs as compared to actual disease burdens, prioritization of health needs, health policies, governance, financing mechanisms, contextual issues, specific interventions and challenges to health system strengthening (HSS) and HIV programming over time.

After obtaining consent, researchers recorded the interviews that were subsequently transcribed. (In the Democratic Republic of Congo, researchers in the field experienced technical difficulties with their recording equipment. In those instances they took detailed notes.) In cases where interviews were conducted in a local language these the transcripts were translated into English or French. All data was coded and analysed using ATLAS.ti software for qualitative data analysis (version 6.2). Microsoft Excel was used for secondary analysis.

Ethical approval for this study was obtained from the KIT ethical review board as well as from the respective countries' research ethical review committees. All respondents were asked for their consent before being interviewed or prior to participating in focus group discussions.

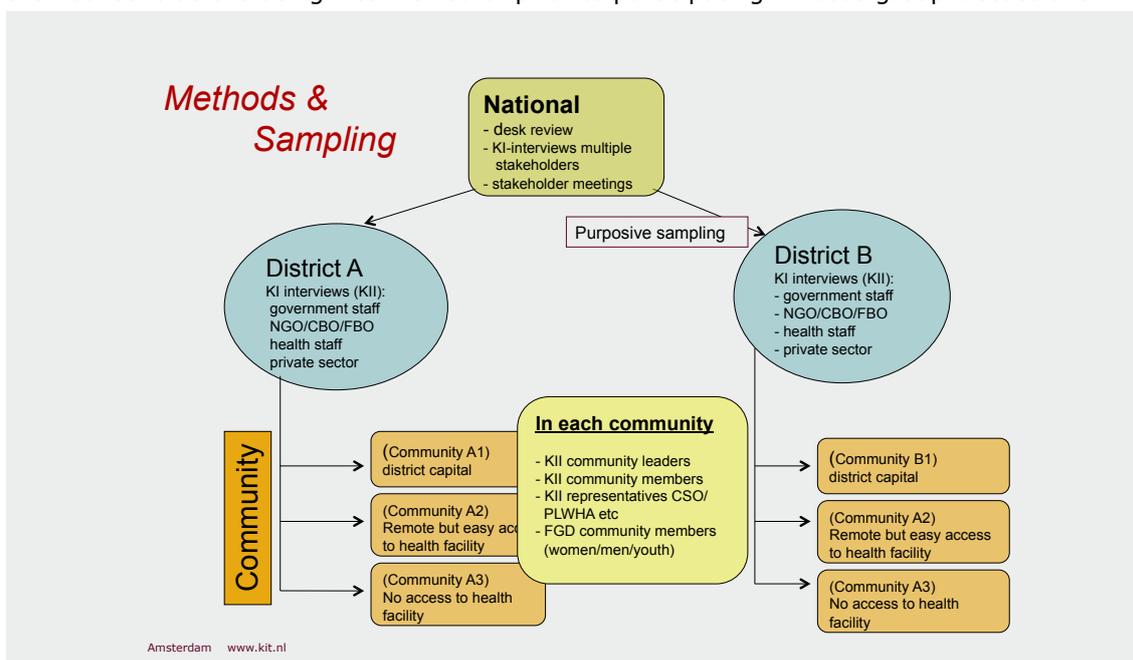


Figure 2 : Sampling framework within the countries

Limitations of the study

This is an exploratory qualitative study using purposive sampling describing examples of interactions between HIV and AIDS programs and the wider health systems. Because only two districts in each country were studied, the findings are not necessarily representative of the situations in other districts and cannot be extrapolated to represent the nations as a whole. The researchers had the same nationality as the respondents, but differences in class, gender, ethnicity and mother tongue may have influenced respondents' answers especially at the community level. Being outsiders in poor communities, whether one is an international or a national researcher, may also affect people's expectations and responses. Translations from national languages into French and English likely resulted in a loss of some meaning and details that are only clear to native speakers. Community members may have used the interview as an opportunity to voice concerns to a larger audience or to try to mobilize funds to address problems in these communities. The quality and quantity of the data generated by the national health system in all countries was very diverse, which limits both comparison between countries and triangulation within countries. There was not enough reliable data available to link shifts in health problems to health policy priority settings prior to 2000. Use was made of international databases to try to fill the gaps in information.

Summary Results of the five African countries

Results are presented by subject areas, which covered the original research topics as well as themes that emerged from the data during analysis.

Health Priorities

Policy makers at global, national and district levels in all countries invariably reported HIV and AIDS as an important health problem that needs to be addressed. The level of importance given to HIV as a health problem varied between countries depending on HIV prevalence rates but was also found to correlate with the social and community affiliations of the respondents. People that work within HIV and AIDS programs tend to attach greater importance to the HIV and AIDS response than people that work in other health programs.

Community-level respondents generally perceived HIV and AIDS as less of a health priority than national level policy makers. HIV and AIDS were rarely identified as priority health needs at the community-levels. Community representatives instead reported concerns about malaria and childhood diarrhoea, lack of clean water and the need for better access to general health services. National representatives mentioned that one of the positive benefits of the international support to combat HIV and AIDS is the increased attention to the health care needs of marginalized populations.

These differences in reported health priorities reflect the influence of development partners and the availability of funding on national health policy planning processes and health priority setting. National awareness of HIV and AIDS has been successfully raised through advocacy and multi-stakeholder processes as part of international development planning, implementation and evaluation processes. However, the availability of disease-specific funding for HIV and AIDS and other priority programs has influenced and distorted priority setting during health planning processes.

The absence of robust health information and adequate analysis of disease trends in most countries further undermines evidence-based priority setting and health planning. In general, communities' perceptions about priority health needs are influenced by the health concerns experienced on a day-to-day basis, such as malaria, diarrheal disease and access to clean water. On the other hand, perceptions are coloured by cultural beliefs and stigma. In the case of HIV and AIDS, moral judgements affect perceptions about what health problems deserve the investment of scarce resources.

Funding

Funding, whether domestic or international, directly affects priority settings: respondents at all levels indicated they would not decline available funding irrespective of whether it fully matches their priorities. In Ghana, a country that has adopted a multi-stage, bottom-up priority setting and health planning approach, several respondents noted that the availability of specific

sources of funding influenced which priorities were passed on to the next level of planning. HIV and AIDS funding made up a significant amount of the money available in the national health systems of the five selected countries. International funding constituted the vast majority of funding for HIV and AIDS. The highest percentage was in Malawi, where 98% of the HIV and AIDS response in 2009 was funded with international monies.

All five countries reported that a positive effect of increased donor funding was the improved accountability that has been a strict requirement of the donors. The accountability mechanisms now require results-based monitoring and robust accounting mechanisms, as well as multi-stakeholder program planning, implementation and oversight. Financial management capacity building, linked with greater donor demands for quality reporting, all played a role. Potentially these enhanced capacities can also be used to improve organizational structures and program management in the larger health system.

Management and Governance choices

In recognition of the need for a multi-sectoral approach, HIV and AIDS programs in the study countries have been accorded special status by their governments. This led to the formation of separate oversight structures, in some cases outside of the ministries of health. This special status is a reflection of the priority that has been given to HIV and AIDS and has arguably facilitated rapid and life-saving responses. However, real and perceived power differences between bodies, such as a national AIDS committee in the president's office versus a ministry of health planning unit, have contributed to a divide. Access to significant donor funding, career opportunities, international conferences, better equipment and other favourable working conditions within the AIDS programs has, in combination with the need to show quick results, led to protectionism over resources within AIDS programs. This sometimes has bred envy and even resentment among staff working in other health divisions.

Staff working in HIV and AIDS programs were granted these special benefits at a time when few people were willing to work in this field. Before the advent of antiretroviral therapy (ART), many staff were infected with HIV and died. Now that health staff have access to treatment, and HIV infection is seen as "just another disease", the relative abundance of resources for HIV and AIDS programming (human, financial and equipment) is not always understood or accepted by staff working in the wider health system. This angers some who feel that HIV and AIDS patients are "undeserving".

Infrastructure and supplies

HIV and AIDS funding has contributed substantially to the material infrastructure of these countries' health systems, through renovation, construction and refurbishing of health facilities, particularly in terms of providing medical and laboratory equipment, and purchasing cars and motorcycles. These improvements benefit the health system as a whole. For example, staff and a counselling room for HIV tests can also be used for counselling about other health issues. However, in practice there are limitations on the wider usage of these structures and supplies as patients may be reluctant to go to a stand-alone clinic that is associated with HIV and AIDS.

Similar improvements to supply chain management, drug forecasting, stock management and the establishment and enforcement of regulations and quality assurance mechanisms with regards to medical procurement were believed to have a potential positive spin-off effect on the wider system. However in most of the countries these systems were initially set up in parallel to the existing system, and new skills and procedures were only gradually introduced for supply and procurement of other medical products.

Strengthening Human Resources for Health (HRH)

Although the availability of ART has transformed AIDS into a chronic condition for millions of people, the disease still puts a great burden on the limited numbers of generally low paid health staff. In the early days of the HIV and AIDS response, the effect on HRH was largely negative as incentives, such as more favourable working conditions and better career opportunities, caused health staff to migrate to HIV and AIDS programs. (The exception to this was Malawi.) In all countries, numerous and uncoordinated trainings caused frequent and prolonged absenteeism of staff.

More recently, however, HIV programs have begun to strengthen HRH through reducing AIDS-related health worker mortality. The AIDS response in Malawi has contributed to the increased availability of health staff through its “emergency human resource plan”. Salary top-ups for all doctors and nurses and investments in pre-service training were instrumental in increasing human resources for health in the entire health system, not just staff needed for HIV and AIDS interventions.

Quality of care, responsiveness and patient-centred approaches

Quality of care was reported to have improved as a result of HIV and AIDS programs; these include better use of equipment, infection control measures and hygiene practises as well as improved staff attitudes and skills. Skills that have been learned within the context of the HIV and AIDS response, such as counselling, can also be used in other health care settings.

The wider usage of such skills and exchange of skills between staff is facilitated by frequent staff rotations among different departments. Client-centred care, patient support, and attention to privacy and confidentiality were mentioned by both health staff and community members as approaches used in AIDS programs that have improved interaction between health staff and patients in other areas of care.

Community engagement in HIV and health

In each of the five countries, HIV programs have catalyzed greater community involvement in the delivery and implementation of HIV- and AIDS-related services. The HIV and AIDS response has supported an increase in the numbers of much needed health volunteers and lay workers, but the research also found concerns about the high turnover rates of these workers and the sustainability of the remuneration schemes. Greater involvement of people living with HIV and AIDS has been promoted by donors and national governments all over the world and is a prerequisite of some donors, such as the Global Fund. PLHIV activists and civil society groups play a role in holding governments accountable for their actions and liaise and mediate between communities and policy makers. National-level respondents in all countries mentioned increased community involvement in the AIDS response. In contrast, representatives at the community level still seemed unaware of opportunities to access health services and participate in health efforts in their community. In addition, most of these community service organizations (CSO) are now almost exclusively funded with AIDS funds, and therefore tend to focus their attention on AIDS. They could potentially increase their engagement in other health issues, but we did not find evidence to assume that this will happen until additional funding for this purpose is made available.

The availability of money for community involvement, though much appreciated when used to remunerate community support activities, has undermined true community engagement to some extent. For example, investigators found instances where community representatives would no longer attend community meetings unless they were paid.

Monitoring and Evaluation (M&E)

Capacity for M&E of HIV and AIDS programs and research has improved at various levels through increased funding and technical support. HIV and AIDS programmes have recruited additional staff and trained existing staff in record keeping. Digitized reporting systems have been introduced in all five countries. Quarterly and annual review meetings, held to support evidence-based management and decision-making processes, have also received funding. The extent to which these improvements benefit the wider health system varies by country and depends on the level of M&E integration. Unfortunately, in most cases M&E systems were introduced as parallel structures, creating challenges during attempts to later integrate these with the general M&E system. An ever-increasing list of indicators requested by donors and development partners further increased the burden of reporting. Information and indicators requested by donors are not in all cases aligned to the priority reporting needs of the Ministry of Health in the country.

Conclusions

Despite increased attention for the need to integrate the HIV and AIDS response with the national health response, we found evidence of continued parallel systems. During recent years, policy makers have called for more synergistic approaches to health system strengthening.

Our case studies showed that there is good potential for HIV and AIDS programmes to contribute to the strengthening of the wider health systems.

Examples of such a contribution are found in better accounting, greater transparency and accountability mechanisms, better quality of care and responsiveness of service providers, improved infrastructure and supply systems, enhanced HRH capacity and stronger M&E systems. Most of these positive effects on the health system as a whole were found to be spill-over effects rather than a deliberate choice to strengthen the health system beyond the improvements that are needed to serve PLHIV. We conclude that the potential benefits for the wider health system are not yet fully capitalized.

Negative effects of the HIV and AIDS programmes on the wider health system have had a distorting effect on priorities in health planning. Staff from the general health services often migrate towards HIV and AIDS programmes and many workers are frequently absent due to training. Already overburdened staff must fulfil additional and uncoordinated M&E requirements. Furthermore, there were some concerns over sustainability because many programs are highly dependent on external donor funding, such as the increased involvement of civil society and community-based organizations or are programs that offer incentive payments.

Because many of the effects on the wider health system, beyond improved services to PLHIV, were effects that had not been planned, it was not possible to fully analyse the mechanisms that contributed to the success or failure of health system strengthening. This means that only few lessons can be drawn on successful approaches by disease-specific programmes towards health system strengthening beyond the disease-specific system needs.

Recommendations

There is a strong need for developing and piloting more deliberate strategies for health system strengthening through HIV and AIDS programmes, with a focus on documenting the mechanisms used, their underlying assumptions and analysing contextual factors that influence the outcomes. Prospective studies and action research are needed to identify successful approaches to use HIV and AIDS programmes to strengthen wider health systems and mitigate potential undermining effects.

Sustainable national and international support to reduce the impact of HIV and AIDS needs to take other health priorities into account, including those of local communities, and be more prominently based on evidence generated by data from national health systems.

Communities can be more meaningfully involved in improving the health in their communities, by discussing with community members the actual and perceived health problems based on health system data including, but not limited to, HIV and AIDS. There needs to be a better exchange of ideas about issues they face, their importance to the community, and their ability and willingness to contribute to solutions.

Support to health system strengthening needs to be system wide and facilitate learning between and within the different levels of the system. In those cases where parallel structures for HIV and AIDS programmes are deemed indispensable in the short term, the potential benefits of AIDS specific programmes on strengthening the wider health system should be more actively pursued by strengthening general systems in preparation for a smooth integration.

International and national support to health system strengthening in countries affected by HIV and AIDS should have a multi-level approach and link the needs at the national, district and community level. Enabling national-level policy environments are essential. However, these will only be effective if they get translated into practical interventions at the health service, community and beneficiary level.

Efforts to strengthen monitoring and evaluation systems should focus on strengthening M&E for the health system as a whole. This should take priority over disease-specific reporting requirements of individual donors, especially in resource-poor settings where trained health workers are scarce, in order to avoid using medical staff to perform administrative duties.

In a similar way, programs that aim at improving the HRH capacity, the material health infrastructure and the medical supply chains will need to strive for immediate integration in order to maximise the benefits for the entire health system in a sustainable way.

Key results and discussion Ghana

A Policy and priority setting

Ghana's Program of Work for 2007 – 2011 (GMoH, 2007 & 2007b) states that the country's health priorities are to improve maternal and child health and to control diseases such as HIV and AIDS, malaria, tuberculosis and guinea worm. Yet the government has essentially made HIV and AIDS a priority by creating specific agencies to address the issue, such as the Ghana AIDS Commission and the National AIDS Control Programme. Perspectives on what the country's priorities should be differ at different levels of the health system. In this study, policymakers and programme managers at the national and facility levels all articulated that HIV and AIDS were a priority. Some, however, thought that the attention given to HIV and AIDS diverts focus away from other equally important programmes, particularly maternal health. They attributed this to the influence of the large sums of money being available and flowing into HIV programmes.

District health workers and community members were less concerned about HIV control as a priority. Their attention was on the need for improved sanitation, clean water and malaria prevention and treatment. They acknowledged, that the HIV programme had contributed to the larger health system as a result of the increased resources, however there was also a sense that further investment in the general health system is needed to improve access to good quality health services.

B. Interaction between the HIV and AIDS Response and the Health System

There are clear interactions between HIV programmes and the health system that have an effect on the success of both. There was a general consensus, that the HIV programme has had positive influences on the health system as a whole. These were mainly in the areas of upgrading infrastructure; providing laboratory equipment and reagents; enhancing the culture of voluntary counselling and testing and respect for patient confidentiality; and improving the quality of care practices including injection and blood safety. It has improved information dissemination, advocacy and social mobilization skills, and monitoring and evaluation (M&E).

The HIV programme has also provided opportunities for skills to be developed in clinical care and management. The programme has had significant influence on the organization of services among health professionals. The training programmes have developed curricula that are applicable to providing services beyond just HIV, which many health professionals have benefited from. Health information management with regard to patient care and financial reporting have improved. This is due to the performance-based nature of the HIV and AIDS financing framework. In a sector with limited resources, the additional funds brought into the system for the HIV programme are seen as a welcome addition and are a significant component of the health budget. Where HIV and AIDS funds have been used to purchase vehicles and fuel, and created incentives for workers, resource-poor programmes have also benefited.

At the community level, HIV and AIDS public education activities have created greater awareness about health service delivery, the need to take personal responsibility for prevention, and the importance of seeking early care. The programme has allowed community members to participate and take on roles with regards to the health and welfare of the community. More local non-governmental organizations (NGOs) have evolved and health education messages have penetrated deeper into the communities. There is no clear indication within this study of the extent to which NGO and CSO engagement has also increased for health in general.

There were, however, expressions of concern. Specific requirements of the HIV programme have meant that some systems such as those for information management and financial reporting have been duplicated. With the limited numbers of staff available, there were visible signs of work overload, fatigue and stress. Many were concerned that an overemphasis on HIV has led to the strengthening of sub-systems rather than the entire system. Furthermore, the fact that the AIDS programme is in many cases better resourced than other programmes, and that these resources are often assiduously guarded, has led to tension between the different program staff.

Stigma against HIV patients by community members and even by health workers continues to be observed in Ghana. In some cases, however, stigmatization is subliminal and couched in innuendo. Though reports suggest that stigma might be on the decline, interviews suggest there is still concern about being associated with the disease. Several respondents were unhappy that their towns had HIV diagnostic facilities, which attracted people who suspected they were positive and resulted in reports of increased prevalence. They felt this negatively reflected on the local population.

Policy Implications for Ghana

- HIV and AIDS continues to be a priority for the health sector especially with a view to further reduce HIV prevalence. However, it is important that all stakeholders reach agreement in terms of the level of priority in relation to other health priorities. Furthermore it is important that the aims and goals of the AIDS-specific response and its relation to the wider health system needs are well articulated and that resource allocation and priority setting is well understood by all stakeholders.
- The AIDS programme has contributed to specific health system strengthening activities, which otherwise may not have happened. In particular, it has improved laboratory quality, health information and financial reporting capacity. It has also led to the inflow of significant resources that helped fund cooperation with other disease programmes that are resource deprived. As most of these effects were aimed at improving the AIDS response rather than the wider health system and a certain level of fragmentation and parallelism was observed, there is need to investigate how the HIV programme can be developed to contribute in a more efficient way to promoting synergies in building the health system.
- This case study describes the contribution of the HIV and AIDS interventions towards strengthening of the wider health system. However the question how to effectively build and sustain the synergies across multiple programmes to the benefit of the system as a whole is not fully answered. Understanding this will enable the sector to develop appropriate policies to better manage the programme and its contributions to entire system strengthening.
- Funds for earmarked programmes, such as those for HIV, have generously supported and improved laboratory infrastructure and equipment supplies and services. However, it is clear that these project-type funding mechanisms are not sustainable particularly because of their time-bound nature. There is a need to incorporate these advances in the HIV programme into the country health strategy. The same applies to improved systems for health information management, accounting and reporting. These “vertical” programme approaches should be integrated and be used to strengthen the government lead systems from the start.
- One of the strengths of the HIV programme is its performance-based financing system. This has created an increased level of accountability and transparency. This is a positive that should be looked at for scaling up of best practices to enhance the system.

Ghana Case study



Figure 3: Map of Ghana

1. Background to the Ghana Case study

1.1 Country context

The Republic of Ghana is centrally located on the West African coast. It is bordered by Togo to the east, Burkina Faso to the north and northwest and Côte d'Ivoire to the west. It has a total land area of 238,537 square kilometres. The **Atlantic Ocean** to the south forms a 560 km coastline, which provides the country important fishing grounds as well as maritime contact with the outside world. The capital is located in the port city of Accra on the Gulf of Guinea.

Ghana has three main ecological zones:

- A sandy coastline backed by a coastal plain vegetated by savannah grasslands, crossed by several rivers and streams.
- A middle belt and western parts of the country with thick forests, streams and rivers.
- A northern savannah with the Black Volta and the White Volta as the main rivers.

The landmass consists of lowlands, except for a range of hills on the eastern border of the country. Mount Afadjato lies west of the Volta River and is the highest point with an altitude of 884 metres above sea. The country has a tropical climate with temperature ranges between 26°C to 29°C. There are two distinct rainy seasons: April to June and September to November and two relatively dry periods that occur in August and during the Harmattan season (December through March). The current population is estimated at 22.4 million. About 70% of the population lives in peri-urban areas. Rural parts of the country generally lack basic development infrastructure such as good roads, electricity and water supplies.

Ghana operates a multi-party democratic presidential system of government with an executive president elected for four years with a maximum of two terms. There is a parliament elected every four years, an independent judiciary and a vibrant media. There are 10 administrative regions: Western, Central, Greater Accra, Volta, Eastern, Ashanti, Brong Ahafo, Northern, Upper East and Upper West. The regions are sub-divided into 170 districts in an attempt to ensure equitable resource allocation and efficient and effective administration at the local levels.

1.2 General health profile

The current estimated life expectancy is 57 years. The total fertility rate was 4.0 in 2008 compared to 4.4 in 2006. The use of modern contraceptives was about 17% in 2009. The crude death rate is estimated at 8.93 deaths per 1,000 population as of July 2010. The maternal mortality ratio (MMR) is slowly improving compared to the previous decade. Between 1990 and 2007, the maternal mortality ratio had fallen to 451 per 100,000 live births, down from 740 according to the Ghana Statistical Services (GSS et al., 2009). At the current rate of yearly reduction in maternal deaths, it is unlikely that Ghana will attain its Millennium Development Goal of 185 deaths per 100,000 live births. It is estimated that the MMR will be 340 per 100,000 in 2015 (Figure 4).

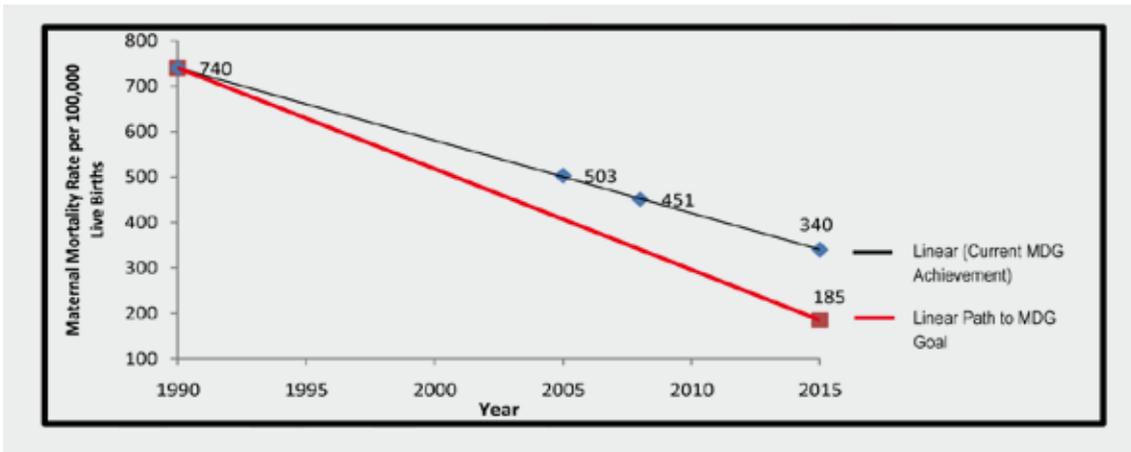


Figure 4: Maternal mortality ratio (surveys), recent and projected

Source: UNDP (2010): *Unlocking Progress: MDG acceleration on the road to 2015*. Government of Ghana (2008): *Management Accountability Framework (MAF) for Maternal Health*

The overarching strategy to achieve a lower maternal mortality rate is to promote use of skilled birth attendants, and offer family planning services from the community health providers through to teaching hospitals.

The 2008 Ghana Demographic and Health Survey (GSS et al., 2008) showed a decline in the under-five mortality rate, with 80 deaths per 1,000 live births down from 111 per 1,000 live births in 2003. The infant mortality rate was 50 per 1,000 live births in 2008 compared to 64 in 2003 with the neonatal mortality rate falling from 43 deaths per 1,000 live births in 2003 to 30 in 2008.

Routine data from health facilities indicates that the major causes of neonatal deaths are asphyxia, low birth weight, birth injuries, neonatal tetanus, neonatal infections and severe congenital abnormalities. Current coverage for Penta-3 vaccine (Hib+DTP+Hepatitis-B) increased from 84.2% in 2006 to 89.3% in 2009 (GHS, 2009). Malaria and acute respiratory infections are the most common fatal diseases in children. Malaria accounted for 30% of under-five deaths in 2008 (GSS et al., 2008). Other common diseases include pneumonia, diarrhoea, malnutrition and anaemia. Ghana is implementing the Health Impact Rapid Delivery (HIRD) programme to scale up key cost-effective interventions delivered countrywide to improve child health that will also benefit maternal health (UNICEF, 2006). The programme delivers a broad range of interventions aimed at addressing the most salient challenges in children's health.

Generally Ghana is considered on course to attaining the child malnutrition target under the Millennium Development Goals ahead of the 2015 target date. However, according to the 2008 Ghana Democratic and Health Survey, 28% of Ghanaian children are stunted; with 10% being severely stunted (GSS et al., 2008). This represents a slight improvement over the 2003 figure, which showed that 30% of children under five are stunted and 11% are severely stunted. The extent of wasting, which is a sign of acute malnutrition, has actually become worse in the last five years. In 2003 seven percent of children under five were found to have acute malnutrition of which 1% was severely malnourished (GSS & GHS, 2004). In 2008, 9% of children had acute malnutrition, with 2% being severely malnourished. Wasting levels were found to be highest at ages 6-11 months, which made these infants more vulnerable to illness.

The epidemiological profile of Ghana shows a concurrent significant prevalence of communicable and non-communicable diseases. Table 2 below shows the top ten reasons for visits to health facilities in 2009.

	REASON FOR VISIT	TOTAL VISITS	% of total
1	Malaria	6,146,523	44.55
2	Acute respiratory infections	1,151,132	8.34
3	Skin diseases and ulcers	574,604	4.16
4	Diarrhoeal diseases	536,846	3.89
5	Hypertension	494,125	3.58
6	Rheumatism and joint pains	416,416	3.02
7	Acute eye infection	264,042	1.91
8	Intestinal worms	249,812	1.81
9	Anaemia	203,906	1.48
10	Pregnancy and related complications	176,888	1.28
11	All other diseases	3,582,264	25.96
	Total	13,796,558	100.00

Table 2: Top ten reasons for visits to outpatient departments in Ghana, 2009

Source: Centre for Health Information Management (CHIM) 2009

HIV and AIDS and tuberculosis. The Ghana Aids Committee estimated the HIV prevalence among the adult population at the end of 2009 at 1.9% with an estimated 267,069 persons living with HIV and AIDS (GAC, 2010). The burden of tuberculosis is estimated to be about 204 people per 100,000 with a case detection rate of 36%, well below internationally set targets of 70%. Case notification rates are currently 64 per 100,000. The number of children diagnosed with tuberculosis increased from 352 in 2008 to 649 in 2009. This is an indication that the index of suspicion for tuberculosis in children by doctors and clinicians is on the increase. The tuberculosis case fatality rate is at 9%. Regional mortality trends in 2008 indicate high rates of tuberculosis related deaths in the Upper East Region (12.5 per 100 000 population) compared with 4.2 per 100 000 population in the Volta Region.

The Directly Observed Treatment Short-course (DOTS) programme was scaled up through capacity building in the public sector. The tuberculosis treatment success rate rose from 72.6% in 2006 to 84.7% in 2008. Default rates have declined from 11% in 2005 to 2.3% in 2008. There were several issues identified that affect tuberculosis case detection and treatment outcomes. The main challenges include weak procedures to detect tuberculosis, inadequate contact tracing, inadequate engagement of community-based providers and inappropriate tools for effective supervision, monitoring and evaluation.

Malaria. Malaria is the leading cause of morbidity in Ghana and was the reason for approximately 40% of all out-patient visits in recent years. The under-five malaria fatality rate, however, fell by more than 50% between 2002 and 2009. The disease accounts for 11% of mortality in pregnant women. The use of insecticide-treated materials is still low (NMCP, 2009).

There has been a significant scale-up in interventions under the National Malaria Control Programme focusing on effective diagnosis including the use of rapid diagnostics kits at the local level, improved treatment compliance and preventive measures using insecticide-treated bed nets, indoor residual spraying and targeted use of larvicides and environmental management. There is a move towards subsidizing anti-malaria drugs to make them generally affordable to all. A significant impact of these interventions on case incidence is yet to be seen (AMFm, 2010). This is because most anti-malaria activities lie outside the direct control of the health sector and will require significant inter-sector collaboration to achieve the MDG target.

Non-communicable diseases. Non-communicable diseases, many of which are life-style-related, constitute a heavy and increasing disease burden. The most significant of these are cardiovascular-related diseases, diabetes and sickle cell anaemia. Crude estimates suggest that disease incidence is expected to rise in the next five to 10 years. Generally, however, there is inadequate epidemiologic data to support decision-making and strategy development.

Since non-communicable diseases are largely caused by lifestyle and nutritional choices, continued efforts are needed in the area of behaviour change communication, including integration into school curricula, in order to promote healthier future generations. Currently, the flagship Regenerative Health and Nutrition Programme, developed under the 2007-2011 Program of Work for health is aimed at addressing some of these lifestyle and nutrition issues (GMoH, 2007a).

INDICATOR	VALUE	YEAR	SOURCE
Socio-economic profile			
Population	24.4 million	2010	WB data catalogue HTTP://SEARCH.WORLDBANK.ORG/DATA?QTERM=POPULATION%20GHANA&LANGUAGE=EN
Population growth rate (%)	2.1	2008	World Bank
Urban population (% of total population)	44	2000	Ghana Statistical Services HTTP://WWW.STATSGHANA.GOV.GH/KEYSOCIAL.HTML
GDP (billion \$US, PPP)	16.7	2008	World Bank
GDP growth rate (%)	7.3	2008	World Bank
Human Development Index	0.526	2007	UNDP
Health profile			
Life expectancy at birth (years)	57	2008	World Bank
Maternal mortality (per 100,000 live births)	541	2008	WHO
Under-five mortality (per 1,000 live births)	80	2008	GDHS
Estimated adult (15-49) HIV prevalence (%)	1.9	2009	UNAIDS
Number of physicians	2,587	2009	HTTP://PORTFOLIO.THEGLOBALFUND.ORG/COUNTRY/INDEX/GHN?LANG
Nursing and midwifery personnel (number)	22,834	2009	GHS Annual Report

Table 3: Selected national indicators

1.3 Overview of the health sector

1.3.1 Organizational structure of Ghana's health system

Ghana has over 3,000 health facilities distributed as illustrated in Annex A. Most health care services are provided by the government through primary and secondary facilities managed by the Ghana Health Service and the three teaching hospitals that serve as tertiary facilities (CHIM, 2009). The organization of services is based on a cascading structure (Figure 5). This, however, represents the ideal rather than the actual situation, as secondary and tertiary facilities are known to also provide primary care services rather than fully concentrating on specialised services.

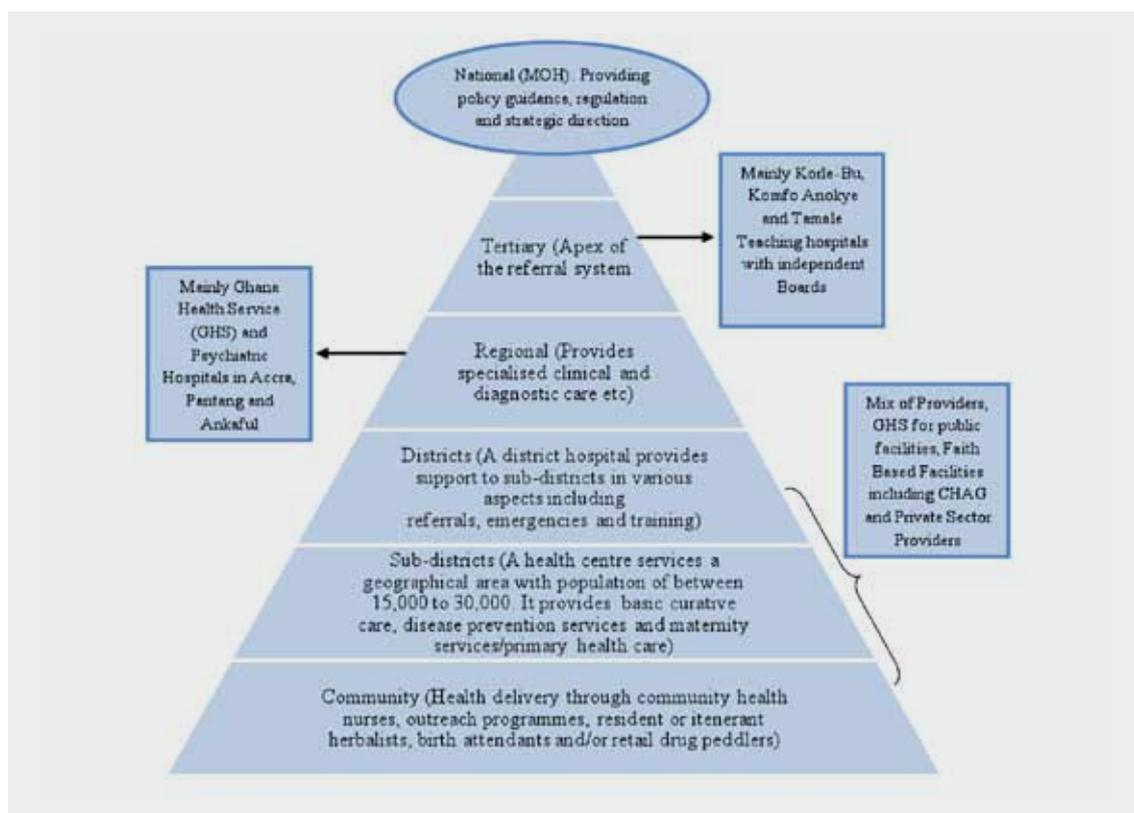


Figure 5: Institutional Structure of Ghanaian public health services

It is estimated that there are over 700 private sector clinics and over 400 maternity homes around the country. The Christian Health Association of Ghana (CHAG), which operates mission hospitals and clinics, has grown from about 135 facilities in 2002 to 168 in 2009. (CHAG, 2010) CHAG estimates that its facilities have over 7,500 beds and that they serve an estimated 35 to 40% of the country. These facilities are located primarily in rural areas and make CHAG the largest non-governmental health care provider.

In 2007, CHAG signed a memorandum of understanding with the Ministry of Health to formalise their relationship. Under this agreement, the ministry funds CHAG to deliver an agreed set of health care services based on annual plans. The precise allocation of the funds is left to the discretion of the CHAG secretariat. Twenty-two of CHAG-affiliated facilities are designated "district hospitals" and are treated as government district hospitals, in terms of funding and human resources. In addition, there are quasi-government health care facilities that include the university, police, army and the prison services. There are also facilities run by business organizations that provide services to their employees.

Pharmaceuticals and drug sales points are available country-wide. Records from the Pharmacy Council indicate that over 6,000 licence applications were processed by the end of the third quarter of 2009 for the establishment and operation of drug, chemical and pharmacy dispensing facilities.

1.3.2 Health policy reforms in Ghana

In 1996, Ghana adopted a Sector Wide Approach (SWAp) (GMoH, 1996). A key feature of the SWAp has been joint planning and financing of agreed priorities and programmes, using mainly a pooled funding mechanism known as the Health Fund. It involves a process of planning with partners, and holding regular multi-stakeholder meetings to discuss policy development and policy dissemination. There are 20 set indicators for assessing performance of the sector as a whole. Formal review meetings are held twice a year with partners to determine priority action areas. A Memorandum of Understanding is signed with the partners who contribute to the common fund and this serves as a basis for priority action. Apart from these high-level summits and discussions, there are monthly meetings to share implementation information as well as receive updates on partner activities. Technical matters are normally covered in presentations at these meetings and solutions to challenges are explored.

The practice of developing five-year, three-year and annual Programmes of Work has continued within the health sector. Since 1997, three five-year PoWs have been developed (GMoH, 1996; GMoH, 2002; GMoH, 2007), the last being the current PoW spanning 2007-2011. Its theme is "Creating wealth through health". The five-year programme identifies several priorities. It includes addressing high infant and maternal mortality; high morbidity and mortality from communicable diseases such as malaria, HIV and tuberculosis; the increasing prevalence of non-communicable diseases; and the inadequate and inequitable distribution of human resources. The 2010 annual PoW focuses on maternal and child health by addressing malnutrition and improving emergency obstetric services. The PoW further concentrates on strengthening primary health care services and health infrastructure, disease control and prevention with a focus on consolidating and scaling up existing interventions to combat communicable diseases, and prioritizes human resource development (GMoH, 2010).

Since 2004, the funding coordination mechanism has been transformed. Partners who earlier supported the MoH Health Fund have moved either to multi-donor budget support (i.e., general support to the government of Ghana) or to sector budget support, which is channelled to the MoH through the Ministry of Finance and Economic Planning (MOFEP). Thus funding from most partners goes to supporting activities in the PoW, and partners also offer other support services to ensure the effectiveness of the PoW. However, an increasing number of development partners are providing earmarked funding for specific activities. These include both bilateral and multilateral partners and increasingly international health initiatives such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and the Global Alliance for Vaccines and Immunisations (GAVI).

1.3.3 Progress in health system strengthening

In 1996, the MoH's "Health of the Nation" report estimated that the total workforce in the public health sector was 29,645. Approximately 51.6% were administrative support staff. The health professional staff figures include staff of CHAG whose salaries are paid for by the government (GMoH, 2001). By the end of 2009, the total human resource figure was 48,975, showing a 60.5% increase since 1996 (MoH, 2010).

The government of Ghana, through tax revenues, continues to be the major financing source for the health sector. Government expenditure on health as a proportion of gross domestic product in 2008 was estimated at 4.3% (Figure 6). External sources of funding dropped from 31% in 2004 to about 10% in 2008 (Figure 7). About 85% of government funding pays for salaries and allowances. The large amount of money required for salaries in combination with shrinking external aid have resulted in a significant funding gap in the sector for service delivery.

Donor	Health sector funding	Program areas
USAID	\$16.8m/year	Reproductive health/family planning, HIV and AIDS
European Union	\$2.9m/year	SWAp, medical supply procurement, technical assistance for the Centre for Health Information Management, HIV and AIDS, sexually transmitted infections
DFID	\$15.2m/year	SWAp, HIV and AIDS, reproductive health and family planning
DANIDA	\$8.1m/year	SWAp, health reform, HIV and AIDS
UNFPA	\$2.56m/year	Integrated reproductive health/family planning services
JICA	\$1.1m/year	Training, technical assistance, community empowerment, grassroots grant aid
UNICEF	\$5.64m/year	Child health, maternal and neonatal health environmental health, nutrition, school health
World Bank	\$12m/year	SWAp, HIV and AIDS
Royal Netherlands Embassy	\$17m/year	SWAp, national drugs programme, research, reproductive health, family planning, female genital mutilation, people living with AIDS
African Development Bank	\$3.1m/year	Rehabilitation of three district hospitals and three regional hospitals
GTZ	\$700,000/year	Health sector reform
WHO	\$2m/year	Health reform, child and adolescent health, maternal health, TB, HIV and AIDS, malaria
Total	\$87.1m/year	

Table 4: Summary of selected donor funding 2002–2006

Source: Adjei, et al. 2010

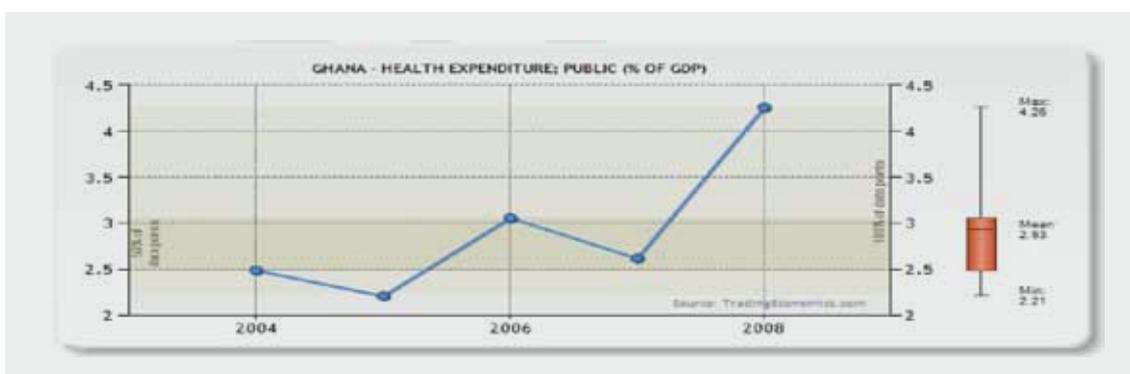


Figure 6: Ghana health expenditure as a proportion of GDP

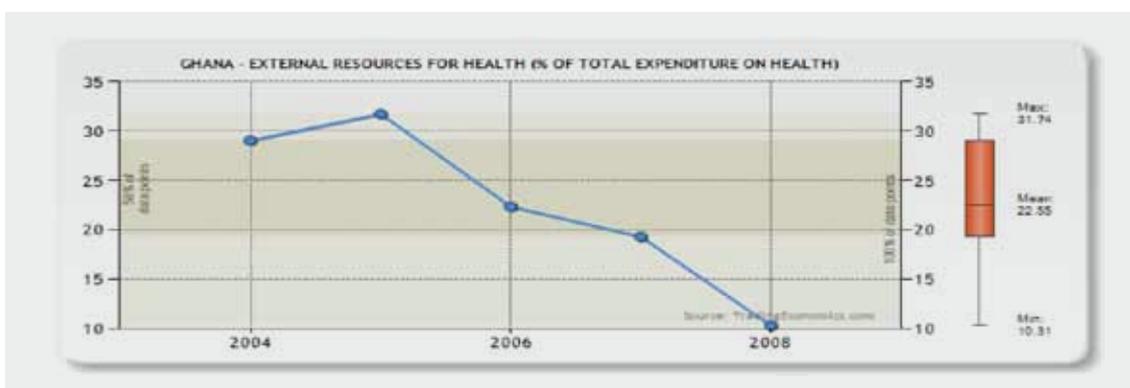


Figure 7: External resources for health as a percentage of total health expenditure

Source: Trading Economics.com

1.4 The HIV and AIDS response in Ghana

1.4.1 Burden of disease

The HIV prevalence among the adult population at the end of 2009 stood at 1.9% with an estimated 267,069 persons living with HIV and AIDS. More women (58%) tested positive as compared to men (NACP, 2011). In 2009, 284 HIV counselling and testing centres were established across the country. This is a 54% increase over the previous year (GAC, 2010).

Approximately 865,000 people, or 2.9% of Ghanaians, were tested for their HIV sero-status in 2009. This figure represents an 85% increase over the number of people who were tested the previous year. The HIV prevalence among pregnant women was 4.2% compared to 6.2% in 2008 (Figure 8). Some 55% of those who tested positive were given antiretroviral drugs for preventing mother-to-child transmission (PMTCT). The GHS is working with other partners to provide food assistance and counselling to 6,000 food-insecure PLHIV on ARVs and their immediate family members.

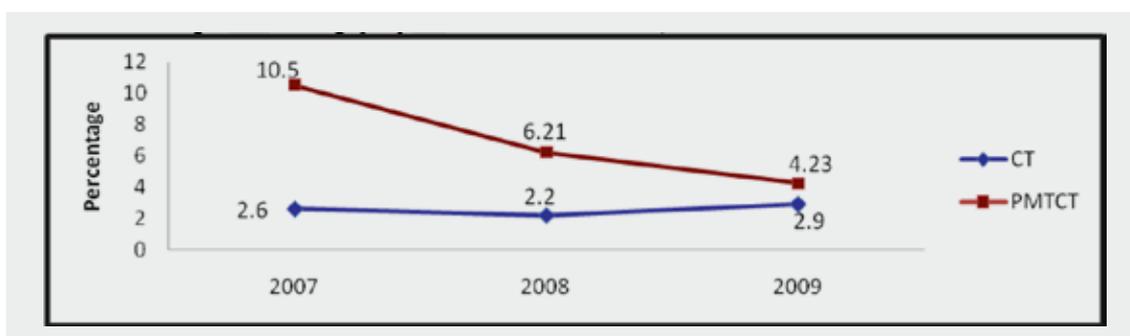


Figure 8: Proportion of HIV sero-positive individuals among people who participated in counselling and testing (CT) and PMTCT activities, 2007-2009

Source: Annual report of the MoH's National AIDS/STI Control Programme, 2009

1.4.2 Institutional framework and the AIDS response strategy

Since the onset of the HIV and AIDS epidemic, there have been several international meetings that have aimed to lay out a number of principles that can be adopted in various countries to foster effective and efficient implementation of HIV- and AIDS-related activities. One of which is the "three ones" principles, endorsed in April 2004 at the Consultation on Harmonization of International AIDS Funding. It was agreed that the principles be applicable to all stakeholders involved in the HIV and AIDS response.

- One agreed HIV and AIDS action framework that provides the basis for coordinating the work of all partners;
- One national AIDS coordinating authority, with a broad-based multi-sector mandate; and
- One agreed country-level monitoring and evaluation system.

The Ghana AIDS Commission is the coordinating body for all HIV- and AIDS-related activities in the country. It oversees an expanded response to the epidemic and is responsible for carrying out the implementation of the National Strategic Framework on HIV and AIDS, the first of which covered 2001–2005. The Ghana AIDS Commission is currently reviewing the National Strategic Framework II, covering 2006 to 2010, with stakeholders, and bilateral and multilateral partners. The frameworks set targets to reduce new HIV infections, address service delivery issues and individual and societal vulnerability, and promote the establishment of a multi-sector, multidisciplinary approach to HIV and AIDS programmes. The National AIDS/STI Control Programme was developed as a public sector institution under the Ghana Health Service to provide technical support.

Ghana's goal is to prevent new HIV infections as well as to mitigate the socioeconomic and psychological effects of HIV and AIDS on individuals, communities and the nation. The first national strategic plan focused on five themes: prevention of new infections; care and support of people living with HIV and AIDS; creating an enabling environment for a national response; decentralization of HIV and AIDS activities through institutional arrangements; research; and monitoring and evaluation of programs.

The second national strategic plan, focused on: policy, advocacy and creating an enabling environment; coordination and management of the decentralized response; mitigating the economic, socio-cultural and legal impacts; prevention and behaviour change communication; treatment, care, and support; research and surveillance; and monitoring and evaluation. Multilateral and bilateral partners, nongovernmental organizations (NGOs), and civil society organizations actively participate in the national response, with more than 2,500 community-based organizations and NGOs reportedly implementing HIV and AIDS activities in Ghana. Substantial funding for these activities comes from the United States, the United Kingdom, the Netherlands, Denmark, Japan, Canada and United Nations agencies. Activities include the five-country, World-Bank-led HIV/AIDS Abidjan-Lagos Transport Corridor project; the World Bank-funded Treatment Acceleration Program for public-private partnership in HIV and AIDS management; WHO's "3 by 5" initiative; and GFATM. Through the United States Agency for International Development's (USAID) SHARP Project, in collaboration with Catholic Relief Services and Opportunities Industrialization Centres International, a program of nutritional support, psychosocial counselling and home-based support is providing services to people living with HIV and AIDS and assistance to orphans and vulnerable children.

1.4.3 Financing the HIV and AIDS response

In 2008, Asante and Fenny on behalf of the Institute of Statistical, Social and Economic Research, Ghana and UNAIDS, published an assessment of HIV and AIDS expenditures in Ghana. The objective of the assessment was to track total public, private and foreign spending on HIV and AIDS across different sectors.

The total expenditure on HIV and AIDS activities in Ghana captured in the National AIDS Spending Assessment (NASA) report for 2007 was US\$ 52 million. Funds from international organizations comprised 78.3% of total spending on HIV and AIDS; public funds comprised 21.4% of the total expenditure while private sources of funding constituted 0.3%. The study did not collect all private (businesses and household or individual out-of-pocket) spending on HIV- and AIDS-related activities, hence this total from the private sector does not represent their contribution to the total spending on HIV and AIDS in 2007. Specifically, what is recorded here is the total private spending from the Ghana Business Coalition against AIDS and the Ghana Employers Association. Comparing the total expenditure on HIV and AIDS in 2007 to the \$ 43.4 million budget for the national response, there was an over spending of US\$ 9 million. A key finding was that out of the total funding by international organizations only 23 percent was sent to the pooled or earmarked fund overseen by the GAC. The remainder was allocated to HIV and AIDS projects not overseen by GAC.

Most of the funds were spent on treatment and care (40%), administration and management (35%) and prevention programmes (12%). The rest of the monies were shared among the remaining five priority areas.

Key areas of Expenditure	(US\$)	(%)
Prevention	6,339,069.00	12.1
Treatment and care	21,026,047.00	40.1
Orphans and vulnerable children (OVC)	153,233.00	0.3
Programme management and administrative strengthening	18,566,509.00	35.4
Incentives for recruitment and retention of human resources	2,788,821.00	5.3
Social protection and social services (excluding OVC)	1,256,559.00	2.4
Enabling environment and community development	902,332.00	1.7
HIV- and AIDS-related research (excluding operations research)	1,412,512.00	2.7
Grand Total	52,445,091.00	100.00

Table 5: Total Spending on Key Priorities or Intervention Areas, 2007

Global Fund monies have increased significantly from US\$ 429,599 in 2002, to US\$ 128 million in 2010. The greatest rate of funding increases was between 2008 and 2009 when the amount rose from US\$ 63.3 million in 2008 to US\$ 107.7 million in 2009. The Global Fund accounted for 50% of funding for the annual PoW for HIV and AIDS in 2006; 52% in 2007; and 57% in 2008. The Global Fund thus remains the most significant source of funding for the fight against the disease. Figure 6 shows the rapid increase in the amount of funding from the Global Fund.

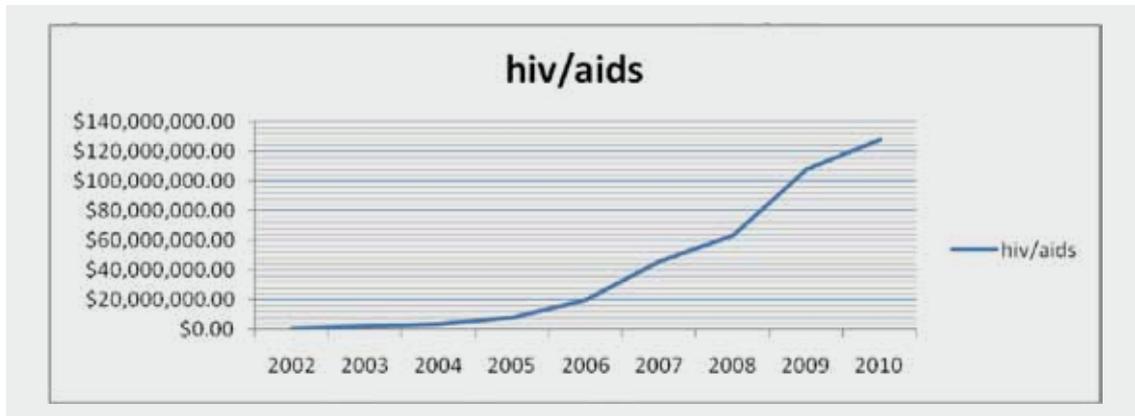


Figure 9: Global Fund contributions to HIV and AIDS financing in Ghana: 2002 - 2010

Source: NACP 2010 Annual Report: Funding and Support to Regions to support health systems 2010 (NACP, 2011)

2. Research Objectives

The overall aim of this case study was to identify practical strategies and solutions on how HIV programmes can best contribute to overall health system development and vice versa.

Specific objectives were:

- To understand the priority health needs and key health system strengthening needs in the countries studied;
- To explore the contributions that the HIV and AIDS response is making to strengthening the health system; and
- To examine the evidence and formulate practical solutions through which HIV and AIDS policies and programmes can contribute to health systems strengthening

The topics for research covered policy and planning strategies, financing human resources for health, medical supplies, procurement and stock management, and service delivery issues.

3. Methodology

The study employed a case study approach to identify evidence of interactions between HIV programming and initiatives to strengthen the wider health system. The study was designed to collect and describe the evidence to answer three questions: a) what are the benefits of HIV programmes to system strengthening? b) how can these benefits be maximised? and c) how can their negative impacts be avoided or minimised? The study used three data collection methods:

1. Desk review;
2. Key informant interviews held at the national, district, health service and community levels
3. Focus group discussions (FGDs) at the community level.

Before the start of the study, copies of the study protocol, tools and informed consent forms as well as profiles of the principal investigators and the research institutions were presented to the ethical review committee of the Ghana Health Service for clearance. When the clearance was given, a stakeholder meeting was held to announce the design and intent of the study and also to solicit support and stakeholder input. The meeting included staff from the Ministry of Health, the Ghana Health Service, the Christian Health Association of Ghana, the Society for Private Medical and Dental Practitioners, the Ghana Medical Association, the Nurses and Midwives Council, various civil society groups and the media. The steering committee for the study was headed by the Deputy Director General of the Ghana Health Service.

Sampling and recruitment of respondents

Data was collected at the national, district, and community levels, which possessed diverse economic, social, epidemiologic and health system characteristics. Two districts were chosen for their distinct characteristics. Lower Manya Krobo is a district with a high HIV prevalence, where the HIV programme is very active. The district of North Tongu has a low HIV prevalence and HIV programming is minimal. Within both districts, three communities were purposefully selected with guidance from the district health management team (see table 6. in the annex). One of the communities was in the district capital, one community was located near a sub-district level health facility and one remote community was at a considerable distance from a health facility.

Data collection through interviews and FGDs was performed in the period from September 2009 till January 2010. Sixteen national-level key informant interviews were conducted, twelve district level key informant interviews and 10 interviews with health workers. This was followed by 13 FGDs and 24 community level interviews in the two districts. In December 2009, halfway through the time of data collection, a team from KIT was in the country for a three-day technical meeting with the research team. During the meeting the information collected so far was reviewed and feedback was provided on interviewing techniques. This informed the second phase of data collection.

The team from KIT was in Ghana again in March 2010 to guide the preliminary country analysis of the data. This data analysis workshop lasted five days. On July 5, 2010, a team from the Center for Health and Social Services went to Amsterdam for an expert data analysis workshop in July, where case study results were shared and compared with the findings produced by the other four country studies.

4. Results

4.1 Alignment of (real and perceived) priority health needs, demands and supply

Ghana has outlined clear strategic objectives for health at the national level and defines programme priorities in specific disease strategies, including HIV and AIDS in its annual and 5-year programmes of work. The study investigated how these priorities have been articulated and translated into action. It also sought to establish the gap between priorities and actions. Respondents felt most diseases were being well addressed by the country's health strategies and disease-specific programmes, such as malaria, HIV and AIDS, hypertension, respiratory tract infections and diarrhoea diseases. Respondents were also able to indicate conditions that are more specific to rural areas including skin diseases. Though HIV and AIDS were mentioned as priorities, there was a general sense that if these were to be ranked in order of ascending importance, HIV and AIDS may not make the top ten diseases. This was specifically mentioned by a district respondent:

"Malaria and typhoid are very common among our clients. Diarrhoea is also common but it is seasonal; it only occurs during certain times of the year. HIV/AIDS is now on the rise especially among pregnant women. However, HIV/AIDS will still not rank among the top 10 diseases according to attendance." [Quote by a district health worker]

When the responses were disaggregated between health policymakers and development partners, there was a sense that policymakers recognised conditions such as HIV and AIDS as concerns but not as priorities. This provides an interesting challenge in pursuing a common agenda. For instance, a development partner commented:

"I think the most important health problems identified by the ministry are under five morbidity and mortality, and maternal mortality. HIV does not come in but, well, if you are talking of diseases it will be ranked as such. [...] but it will be ranked low. [...] HIV doesn't rank in my most urgent problems for Ghana" [Quote by health development partner]

This discrepancy was not seen as a denial of the importance of the HIV and AIDS situation. Rather, respondents were concerned that the focus on HIV and AIDS is taking away attention from other equally pressing health conditions, such as the high rates of maternal and child mortality. This opinion expressed by health policy makers is supported by surveillance in the past five years, where data has shown that the prevalence rate for HIV has remained quite stable. Indeed, when compared to other countries, Ghana is not experiencing the HIV and AIDS crisis that others face, and the response strategy should reflect this.

Community health workers, when asked for their opinion on what they consider as priority, mentioned malaria, which they recognised as a disease with a high burden and direct impact on the community. Also issues of access to health facilities and clean water and sanitation services were mentioned as priority. The study also found that community members were able to articulate disease challenges of complex nature such as bilharzias, hypertension, measles and diabetes as common problems. HIV and AIDS however did not feature as priorities.

This overall sense of relativism by respondents from different levels towards the importance of HIV and AIDS as a health priority seems to be somewhat in contrast with the amount of funding available for AIDS in comparison with the overall health budget.

Ghana has adopted a bottom-up health priority identification and health planning system. For each planning cycle health priorities are aggregated, discussed and agreed on at different governance levels, starting from the community level up to central government. Some respondents commented that availability of specific programmes may influence these discussions and have an effect on what filters through to the next level of aggregation.

The study also examined in how far the health sector set priorities based on evidence provided by routine surveillance, information about the burden of disease and research data. The responses showed that though priorities may be set in policy and strategy documents based on evidence, in reality, implementation is based on a number of factors. Policymakers and managers were constantly challenged with competing demands and a constraint in resources and health sector capacity to deal with these demands. Yet the earmarking of available funding is what determines what programme receives attention.

"The burden of disease I am not sure whether really that is what is driving what is a priority and what is not. It is the money which is driving what is to be done.... So that is why I believe personally that what has funding, internal funding earmarked that dictates priority and of course HIV/AIDS is one. If you go to any of the districts it is one of the priority interventions carried out now because there is money for it."
[Quote from a National Programme Officer]

"Yes, with the different actors everybody thinks their programme is more important than the others... Donor styles and ways of working to a large extent have been disruptive. It's like you dangle the carrot before the rabbit. Because they come with money and you want this money, then you will have to stop all that you are doing and do what they want you to do." [Quote from a national level respondent]

At the community level there is a sense that AIDS is a lower health priority, as noted by a male community member during a focus group discussion:

"If AIDS is a problem here I haven't noticed it as a problem here."

Community members are generally concerned with other health priorities and some mention they see no benefit in the resources spent on the AIDS programme.

"I think the government should stop the AIDS programmes and use the money for more important things [such as] pipe borne water, hospitals, buy exercise books and give to school children free of charge." [FGD Community men]

A number of community members believed that people infected with HIV did not deserve all the current attention and expensive services. Continued misconceptions on HIV and AIDS may still influence people's perceptions and contribute to some level of continued stigma at the community level.

As a disease, there is no doubt that the impact of HIV and AIDS on the population is acknowledged. HIV and AIDS are regarded as priority programmes but probably not the greatest priority. It is highly likely that if sufficient government resources were available generally, HIV and AIDS would receive priority but possibly not to the current extent. However, given that resources from government or those available to be allocated to other key priority programmes are limited, the well-resourced programmes such as HIV and AIDS programmes may appear to be "over-prioritised."

When funds are tied to a specific disease then it is only logical that those programmes are given more attention. This is not entirely negative as the alternative would be that the programme would suffer the same fate as the non-resourced programmes. Any resources that are not flowing through the government-established health planning system and health sector budget, have the potential to generate distortions in promoting a balanced emphasis on priority programmes. As this study produced no hard evidence that equally important programmes have suffered due to HIV and AIDS programmes, the reference to "over-prioritization" in favour of HIV and AIDS programmes is to be taken with caution. Investigators believe that the responses are a reflection of the general weaknesses in the existing health planning system rather than a judgement on the HIV programme.

4.2 Interaction between the HIV and AIDS response and the health system

The AIDS response and the AIDS programme have had a number of effects on the health system as a whole. While some of these were found to support the functioning of the wider health system, other effects were considered to be less positive.

4.2.1 Effects on HS processes and management

Planning, management and coordination

The HIV and AIDS programme has over the years developed strong systems to be able to respond to the various challenges and demands of government, health development partners and various stakeholders. As a result, the programme seems to have attained a completely independent status from the rest of the health sector. Respondents suggest that the Ghana HIV programme has been designed to undertake all activities on its own with both positive and negative effects on planning and organization of services. Several respondents expressed this sentiment:

"What I should say is sometimes it's a little bit difficult to view a situation where programmes are behaving like states within a state [and] what I said before is there is the effect of verticalization and fragmentation at the district level of services". [Quote from a regional health officer]

Respondents suggested that the HIV programme management system and the organization of services are not integrated into the wider health system with parallel structures emerging for oversight, monitoring and programme management. Several respondents expressed concern that the National AIDS Control Programme does not involve all relevant institutions in their planning and budgeting processes. Respondents said that the HIV programme was not integrated into the national planning system and its planning activities were not harmonised with the planning cycle of the sector. The emphasis on scaling up the HIV and AIDS interventions has created tension among various general health managers who see their operational territories split, sections related to HIV and AIDS taken away from their responsibilities, reorganized, renamed and given to other operational managers and become better funded. Some respondents were concerned about external influence over programs and procedures that should ideally be handled nationally.

On how to proceed, respondents were of the opinion that the HIV programme, if properly integrated into the health system, should support effective health system strengthening. There were various discussions of what is possible and the opportunities that exist. In the words of a respondent:

"The opportunity will be to really integrate the services and not make them vertical. For instance if you have HSS [health system strengthening], you cannot have funds for HSS for TB, HSS for malaria and HSS for HIV/AIDS. You should strengthen the systems generally and they will use it for the other programmes. There should be harmonization in planning at all levels". [Quote of a national health officer]

Respondents suggested that the design of the HIV programme as a parallel programme was not necessarily problematic. What they wanted most was to be allowed to participate in the planning and decision-making processes. Respondents believe there could have been not only better coordination between the HIV and AIDS programme and the general health sector management, but that plans for the Aids programme and general health sector plans should be developed in collaboration and coherence.

"The missing link here is that you don't get divisions but get the programs [Ghana Health services and disease programs] talking to each other and making inputs into each other's plans. That is where the linkages are not fostered and that is very wrong. [Quote by a national level health programme officer]

There is clearly a leadership gap in providing direction and pulling together the opportunities inherent in the various programmes to benefit health planning and system strengthening. The effects of a lack of linkages and synergies trickle down to lower level programme implementers as vertical programme requirements. The appeals for consistency are being made for HIV programme planning and resources to be integrated into related programmes, such as reproductive health planning, maternal health services and tuberculosis programme planning at the national level.

Providing an alternative view, several respondents noted that while vertical systems do exist, they have a minimal impact on actual service delivery. For example, health workers stated that they do not compartmentalize health care services irrespective of where the funds come from.

When out in the field, they address any and all issues that arise. Furthermore, health facilities offer all types of services to their clients as a comprehensive package.

Separation of functions is a consistent and integral part of service organization based on the peculiarity of the demands of the disease intervention. HIV and AIDS by its very nature do evoke such peculiar need to isolate aspects of its services. Irrespective of this separation and special focus, according to many respondents all services are given equal attention:

"No services have deteriorated because we have integrated all the interventions and health issues together." [Quote by district health worker]

The respondents at the district and local levels pointed out that family planning activities have always been a part of HIV services and vice versa. Health workers run integrated programmes and services for all disease conditions and do not deal with each of them in isolation.

They claim that when they are going to talk about HIV and AIDS, they also talk about TB, malaria and the other diseases. Thus, when they receive resources for specific programmes, they end up using them for the other diseases as well.

Governance, transparency and corruption

The general opinion was that there has been an increased demand for transparency and accountability in the health sector since the introduction of the HIV programme and this seems to be yielding some positive dividends at all levels. There was a greater awareness that every dollar spent needs to be properly accounted for and that failure at any level holds sanctions for the entire system.

"I think the authorities now think about a lot of things, for instance that other people will hold them accountable for their actions and in-actions. Maybe they have started thinking that it is time things are done properly. For us, those who are on the ground, we have started identifying ourselves as part of the solutions and so therefore put up our best". [Quote from district health officer]

Due to this requirement for high level of accountability, interviewees said that so far they have not heard of any embezzlement. This suggests that the accountability requirements have strengthened the financial management system of the health sector. Managers intimated that they always pressurize staff to seek value for money so that programmes are evaluated positively and funds may be released more easily.

These perceived increases in accountability and transparency have been extended to the implementing agencies particularly at the community level. Smaller organizations at the district level, which benefit from HIV and AIDS funding, have to account for money spent. So far the impression is that these NGOs use their money well.

"I can say that the NGOs utilize their funds well and they are serious about what they do. The HIV intervention is multi-sectoral and of varied backgrounds. [...] This led to a system of checks and balances, which was built in the national response." [Quote from a district health worker]

While upward accountability has clearly improved and also downward accountability is taken more seriously, many people at the grassroots level appear unaware what HIV funds are spent on and who benefits and why. There is still room for additional transparency and improved communication to the general public as illustrated by the following quote:

"The issue is that we don't have HIV/AIDS here, hence when they are given money for programs we can't tell. They haven't used any money here. They only come to show films on how to protect ourselves and take care of those who have the disease. They just gather us and show us films and go and spend the money." [FGD community men, rural high prevalence]

Lack of transparency easily leads to distrust:

"The funds released for HIV do not contribute to anything. Those monies end up in people's pockets [...] [of] the Queen Mother's Society." [FGD community men, district capital]

4.2.2 Effects on health system inputs

Health financing and funding

As explained above, since 2004, most donors have revised their funding modalities and have increasingly turned towards general budget support or sector budget support, which is channelled to the MoH through the Ministry of Finance and Economic Planning (MOFEP). Thus funding from most partners goes to support activities in the programme of work (PoW) for health. However, while channelling the funding through the government general and sector budgets an increasing number of development partners are providing the funds as earmarked funding for specific activities. These include both bilateral and multilateral partners, as well as the international health initiatives such as GFATM and GAVI. This means that funds within the budgets are ring-fenced and that the country needs to show reaching certain targets against the money spent.

Health infrastructure, equipment and drug management

Ghana overall has a reasonable number of health facilities. These are financed by government or through loans and grants from development partners. However, distribution remains poor, particularly in the poorest districts and rural areas. Because of this, Ghana's health infrastructure, including equipment, still falls short in relation to access and demand for health services by the general population. Many respondents complained about the distance between facilities and the fact that government and partners have not been able to build more health centres, clinics or Community-based Health Planning and Services (CHPS) centres. Ghana has recently begun to see infrastructure and equipment being improved with support from earmarked disease programmes such as that for HIV and AIDS. Many people expect that these programmes will continue to support infrastructure development while recognising that disease specific programmes cannot take on full rehabilitation of the entire health system.

"So there are many expectations of the programme to contribute to the system. For instance, in infrastructure development, the programme can do rehabilitation and maintenance but cannot do full construction. But in certain areas, it is important that you do full construction to get the programme running". [Quote from national officer]

A national-level respondent indicated that with funds from the Global Fund, construction was on going at *"...the centre at Effia Nkwanta, we are also upgrading the store in the Brong Ahafo region. We are building a cold room for vaccines [and] related medicines at Korle-Bu. So if nothing [at] all, these are three landmarks that everybody can point to and say that NACP supported."*

In addition to the regular government budget provisions for renovations, health workers have been able to use HIV and AIDS funds to support the renovation of some reproductive and child health centres. One respondent stated that:

"It is the HIV funding which is helping us to renovate this structure here. They are helping with the laboratory's aluminium frames and doors for the labs and equipments and the dispensary so, I can say that they have done a lot". [Quote from district health officer]

As to whether HIV and AIDS programmes influence the number of health facilities, it was observed that many facilities have remodelled their structures to include additional services thanks to HIV and AIDS funds, but this does not lead to additional health facilities. As a respondent stated:

"For example, some pharmacies have consulting rooms, and laboratories have extension services and counselling. Programme funds have also been used to provide small laboratory units to facilities all over the country". [Quote from national planning officer]

Laboratory investigations are one area in which HIV and AIDS programmes have had tremendous impact. All facilities that offer ARV treatment have either had their laboratories refurbished or equipped by the NACP. This is to ensure the accuracy of HIV test results. These laboratories have improved other medical diagnostics.

Respondents valued the fact that earmarked programmes such as HIV and AIDS have strengthened laboratory capacity, particularly the public health reference laboratories and facilities at the Noguchi Memorial Institute for Medical Research. The HIV programme has supported the procurement of reagents, PCR machines in each of the ten regional hospitals and CD4 count machines for several health facilities.

These positive effects of the HIV programme on health infrastructure have contributed to improved quality not only of health infrastructure and supplies but also the services rendered to the clients who use these facilities. Where laboratories, equipment and drug storage facilities have been provided, this has gone a long way to strengthen capacity for service delivery beyond any single programme.

Training and capacity building

With funding come opportunities for capacity development. Not only did the HIV and AIDS programme refurbish and supply equipment, it also developed the capacities of the laboratory staff. Existing health care workers had to be given skills to handle the new challenges involved in HIV care and treatment. Most of the training was on-the-job training and generally focusing on HIV and AIDS both nationally and internationally. The programme trained laboratory staff in the use of new equipment, which allowed them to conduct more sophisticated investigations. Training also covered advanced methods for collecting and analysing data, and the implementation of quality control measures. These skills are not only applicable to HIV and AIDS, but can be used more widely.

"Capacity has been built for these laboratories as the HIV and AIDS programme has trained the laboratory staff on the use of this equipment. Once in a while, technicians from the NACP come around to service the equipment and check on quality assurance." [Quote from a laboratory technician]

"These have improved a lot. More logistics and equipment have been provided. Even the staffs have been trained on the use of these new equipments. New staff has also been posted to our facilities." [Quote from district health worker]

During clinical training sponsored by the HIV programme, other technical training programmes such as proper prescription for malaria and treatment of tuberculosis were provided. Management skills improved too. Though disease specific, the HIV programme provided impetus for generating interest in effective stewardship particularly in the areas of accountability, accounting and management capacity. This happened as a result of the need to demonstrate these qualities in order to attract funding for the disease-specific programmes and the health sector as a whole. Without the performance-based dimensions provided by the grant requirements, this probably would not happen, as pointed out by one respondent:

"When we were dealing with government resources alone, I didn't have any business talking about good governance and transparency. However, we are now dealing with people, money from multilateral sources and diverse sources. So you must understand what those issues mean and develop your own capacity in terms of leadership style and competence to be able to manage resources... So, the pandemic means that more resources are going to come to the sector and you have to be much more accountable in terms of transparency in the way you do things". [Quote from national health officer]

The same officer noted that the resources they are entrusted with have increased and that: *"nobody will entrust such huge resources into your hands if you've not demonstrated good quality leadership style and capacity and competences"*. Thus with increased resources even from HIV programme sources, actors have come to appreciate the accountability responsibility placed on them and are aware of the potential sanctions that may follow on inefficient use of resources.

It is also evident that the HIV programme has undertaken measures to develop and strengthen technical capacities, both within the programme itself and the health system as a whole. This has been in fields such as health information management where professionals have been trained in data collection, analysis and reporting, as well as quality control and quality assurance in health service delivery.

Though the activities are meant to meet reporting requirements for HIV and AIDS, respondents at the district level generally feel that the trainings have equipped them to use the skills for other programmes.

Effect on workload

There has been an increase in the number of people who use and access care at the health facilities, which is largely attributable to the introduction of the National Health Insurance Scheme [NHIS] (Seddoh and Adjei, 2010). Opinions about whether HIV and AIDS programmes increased the number of patients and the workload varied. Part of the respondents stated that HIV counselling and testing and the requirements for reporting specific data for the HIV programme had increased their workload.

"We overwork ourselves. I do antenatal [clinic] after which I will have to help with the clinical care for the positive mothers. The patients are many and the procedures each client will be taken through are also many. This puts pressure on the few available staff". [Quote from district health worker]

"The workload has increased. The same number of staff has had to deal with increasing number of cases. People's tasks have increased." [Quote from a district health facility worker]

"HIV/AIDS clients need special services and for this reason they frequent the hospital more than the other clients. It must also be stated that the number of processes which HIV/AIDS patient is taken through are so many which means an increase in the workload of the clinical staff". [Quote from a district health facility worker]

Other respondents stated that their jobs have not changed but rather their duties have increased. Now they are required to account for the work they have done and the services they have provided under the HIV and AIDS funding system. In the past, they could finish their tasks in a normal workday. Now during peak reporting periods, some respondents indicated that they end up working long hours and weekends.

"More time is now spent on filling of forms and data collection. When it is time to write our reports, I come to work before 7:00 a.m. and close sometimes after 9:00 p.m. Even sometimes I come to work during the weekend". [Quote from national health worker]

Other respondents said they did not believe that a particular disease or disease programme had increased their workload. If their duties did increase, they could not attribute it to HIV and AIDS patients or the HIV programme.

"It has not influenced the workload. I say so because anybody who comes to this facility to seek care is a client and any client is a client. So I can't say HIV/AIDS has influenced the workload here". [Quote from a district health facility worker]

Incentives and the brain drain

The increased resources provided by the HIV programme have been a mixed blessing for health professionals. In Ghana, the HIV programme offers incentives to health workers to serve in areas others are unwilling to work in. It has not always been in the form of salary increases, though that may exist in the form of field allowances and training allowances. Instead, programme funds have also been used to provide accommodation and services for staff posted to poor districts. As noted by this health worker:

"Since last year we have been receiving funds from NACP and we use some for rehabilitation [...] and other issues to make life easier for the staff". [Quote from district health officer]

The additional financial incentives for those who work in HIV and AIDS programming, however, have distorted some people's expectations. Health workers have demanded additional payment even if the work is part of their normal duties. In the absence of these incentives, there can be an indifferent attitude towards work, as noted by one health worker:

"Morale among the staff in this facility is low because there is no form of motivation or incentives. When FHI was with us, they motivated everybody and you could see the results". [Quote from district health officer]

The HIV and AIDS programme, because it is well endowed with resources, tends to attract highly qualified personnel with the requisite skills and knowledge. Financial incentives have encouraged some health professionals to focus on HIV and AIDS and lose interest in other public health programmes. Those who develop an expertise in HIV care and treatment also become more marketable internationally and end up working for international organisations rather than serving locally.

4.2.3 Effects on collaboration between sectors and stakeholders

Community and civil society engagement

The HIV programme had a positive effect in fostering a multi-sector response and encouraging collaborations. District health management teams worked with the private sector, non-governmental organizations (NGOs), civil society organizations (CSO) and community-based organisations (CBOs) to deliver services. A number of NGOs were contracted under the HIV programme to get involved in health promotion and advocacy. This was widely acknowledged by respondents.

"There is now collaboration between the public and the private sectors on health issues. For instance, there are now more NGOs in HIV/AIDS activities and other health issues. What this means is that there is unity of purpose and the people have come to form a common goal". [Quote by national health officer]

"I will say that [the HIV response] has been a collective and collaborative responsibility of the central government, the district assembly, the NGOs and CBOs all playing their roles. We have maternity homes which play a vibrant role when it comes to HIV/AIDS. Traditional authorities [and] a vibrant Queen Mothers Association, who help in HIV/AIDS activities and helping the orphans". [Quote by district health officer]

The HIV programme helped develop the competencies that have long been identified among NGOs and CSOs as necessary to support community-based service delivery. Health professionals in this study acknowledged that NGOs are able to engage community members. Their grassroots activities allow them to bring people together and really affect behaviour change. Increased funding to CSOs and NGOs reflect this.

"There's no way in health, in HIV and AIDS that government alone can do it without having civil society, or community empowerment, especially if we are to pursue this CHPS component, which is very important in Ghana". [Quote from health development partner]

The opportunity to access Global Fund monies was mentioned as a positive development by the NGOs.

"Since the inception of this Global Fund a lot of these civil society organizations have grown and made their voices heard. They've made their contributions to services delivery. Without [GF] nobody [would be able] to engage in service delivery". [Quote from a national non-government officer]

The value of the multi-sector response has not been lost on community members. Community members acknowledged that there has been a great change in the way health services are managed in the community. This is clearly seen in the formation of community health committees and the change that occurred as a result of their quest for better health conditions. The communities mobilized extra care for those who were ill and created support teams for the health workers. These community mobilization efforts encouraged partnerships and experiences from which subsequent programmes could benefit.

It appears, though, that using community-based volunteers and organizations for HIV and AIDS programmes has its own challenges. There are concerns about personal information, patient confidentiality and stigma that needed to be handled delicately. Thus, PLHIV have often chosen to start up their own support systems. The members of these associations often voluntarily declare their status to encourage people to go for tests and access care. In what respondents called “the module of hope”, PLHIV are involved in sensitization awareness programmes and support other HIV-positive people with counselling. By getting involved in patient care, PLHIV have developed a better understanding of the HIV programme.

4.2.4 Effects on health system outputs and outcomes

Efficiency and quality of care

The HIV programme is generally cited as having brought significant benefits to the health sector particularly in improving professional standards and quality of care.

“The effect of HIV/AIDS quality of care is very dramatic because it improves our safety system. In fact, even protection for the providers. I always give this example. There was this young doctor, who died. I’ve always said that if [name withheld] was alive in this day and age, he wouldn’t have died. He had a very violent type of hepatitis, which he caught from a patient simply because there were no gloves”. [Quote from a national officer]

“Some things have changed. Though there were protocols and guidelines people didn’t pay so much attention to them. However, with the current system, things have changed, those standards are applied everywhere and you will be able to [see] such protocols pasted on the walls in all the hospitals. This is a result of the fact that monitoring is done on the use of such guidelines and protocols”. [Quote from a district officer]

Respondents noted that the one area where there has been consistent improvement has been in infection control. Health workers, especially the clinical staff, all take protective measures such as wearing gloves or masks, hand, proper disposal of syringes and needles. The measures were previously in place but workers said they never bothered to put them into the practice. It was only with the arrival of HIV and AIDS programs, and the strict enforcement of infection control measures, that workers began to adhere to them.

Modifying attitude towards clients

Respondents noted that stigma towards HIV and AIDS patients still existed among health workers. As stated by this respondent:

“the main challenges here are that most of our healthcare workers, believe it or not, are still not happy and confident in working with people living with HIV/AIDS. People are afraid, which means that we have not been disseminating the right information”. [Quote from a representative of a civil society organisation]

Some were unhappy that people living outside the community came to their local hospital for HIV testing. When they test positive it skews the numbers for the local community, which upset one community member:

“If they are not from here, they must be asked to go to their [own] regions so that the disgrace will come down”.

A greater understanding about how HIV is transmitted and can be treated has, however, improved people’s perception of the disease. With antiretroviral therapy and treatment for opportunistic infections, it is no longer physically obvious who has AIDS and who does not. Health workers are also less apprehensive about interacting with clients. Training in communication and counselling is thought to have improved relations among providers, families and whole communities.

The culture of patient counselling has resulted in the transformation of health facilities, such as remodelling out-patient's departments (OPD) to ensure auditory and visual privacy for HIV and AIDS patients. Waiting rooms and additional counselling rooms have been built. As one respondent stated:

"HIV/AIDS brought to the fore the need for greater confidentiality because of the stigmatization that it carries. I think the health sector now is more cautious about the privacy of the individual". [Quote from national officer]

It was reported that counselling is now a major aspect of health worker training. The culture of counselling has become wide spread because of the extensive training associated with VCT. Health personnel now speak with greater confidence, which has improved how the messages are delivered.

"Previously, even the educational messages on HIV/AIDS rather scared the people away. But now the education messages are more friendly and encouraging. We also use the "module of hope" in our activities. These are PLHIV who have been trained on counselling and they help us a lot especially when it comes to a client who has just tested positive. These PLHIV even help us in clinical care". [Quote from district health worker]

This new skill among health professionals has transferred into other service provision areas. It is generally considered that if the same level of counselling and education on HIV can be transferred to all the other diseases, the system will be strengthened.

5. Discussion

Ghana has an HIV prevalence rate that is low in comparison to other countries in sub-Saharan Africa. Still, the numbers have dramatically fluctuated over the past decade. Since 2000, the median HIV prevalence rate among pregnant women in sentinel surveillance sites increased from 2.3% to 3.6% in 2003 and then declined to 2.7 percent in 2005. It rose to 3.2 percent in 2006 before falling to 2.6 percent in 2007. (NACP & GHS, 2007) So far the country has managed to keep its HIV prevalence at 1.8% at the end of 2008 and a slight increase to 1.9 in 2009.

Policy and HIV as a priority programme

The Ghana PoW 2007 - 2011 identified the country's health priorities as maternal and child health, and control of communicable diseases such as HIV and AIDS, malaria, tuberculosis and guinea worm. Annual reports from Ghana Ministry of Health and the Ghana Health Service indicate that the country is making efforts to achieve its 2015 targets for the Millennium Development Goals.

From the responses, HIV and AIDS is considered a priority programme by health service providers, though some partners preferred to refer to it as a programme of concern. This is because of other competing needs within the sector. When ranked in order of priority, malaria, diarrhoea and maternal and child health were of greater concern. At community level HIV and AIDS are understood to be an issue of concern, however it is generally not perceived as a priority to be addressed. Most community members would rather see further investments in health to be focussing on increasing access to health services in general. This is not surprising given the relatively low prevalence of HIV in Ghana. Some negative responses in relation to money spend on HIV by community members should be seen in that same light, but it is not unlikely that there is also an undercurrent of misconceptions and stigma that influence the views of community members.

There is a clear sense that donor funding and the amounts allocated to specific health topics influences the overall resource allocation within the national health budget and the prioritization in implementing health programmes. That notwithstanding, the emphasis on HIV and AIDS is not considered misplaced by health policy makers, particularly in a resource-constrained environment. It is therefore generally appreciated that dedicated resources have been provided for addressing the situation and it is this emphasis that has helped Ghana to maintain a low HIV prevalence.

The main concern remains fragmentation within the health system as a result of emphasis placed on the HIV programme. This is expressed not in terms of objecting to the money spend on HIV and AIDS, but rather as observations towards a need to strengthen the linkages across programmes so that synergies may be achieved. Although some development partners and national level health policy makers commented critically on the effect of available AIDS funding on health priority setting, it is comforting to learn that respondents at district level felt that no programme has suffered significantly from the stated fragmentation at the national level. This is explained by the fact that to some extent a re-allocation of resources and time from the AIDS programme to other health programmes takes place at service delivery level.

Respondents suggested that there is a need to share information between the AIDS programme, other priority health programmes and the health policy and planning offices. Respondents further recommended the different programmes to consult at the design, planning and budgeting stage. These suggestions are worth taking given that any of the HIV interventions is directly linked to elements of other programmes e.g. expectant mothers, reproductive health or diseases that present as co-infections e.g. tuberculosis.

Community awareness about the importance of combating the AIDS epidemic varies between different regions. In order to maintain high levels of support for AIDS programming, additional investment in raising community awareness and reducing stigma is still warranted.

Effects of the AIDS programme on planning and management

The investments through the HIV programme in Ghana have had a direct effect on strengthening health systems in a number of areas. However, the design of the HIV programme has introduced a management challenge that leaves questions to be answered as to which institution has oversight responsibility for it. Increasingly, HIV interventions assume an independent programme status because of the large inflow of funding provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). Given the parallel management structures, particularly through the Country Coordinating Mechanisms (CCMs), it is difficult to determine which institution within the public health system has oversight responsibility for the functions of the National AIDS Control Programme. It was suggested during this study that the National AIDS Control Programme, which is legally an institution under the Ghana Health Services, operates as though it is an equivalent body. Meanwhile, the Ghana AIDS Commission, the government's central agency tasked with coordinating the national AIDS response, is resource constrained. This has resulted in the Commission coming down to the level of other implementing agencies and competing for the same resources that other implementing agencies are attempting to access under the Global Fund financing arrangement. In the process, it appears to have lost its stewardship focus.

Effects of the AIDS programme on health professionalism and quality of care

The effect of the HIV programme on quality of care has been significant. Notable changes have included the enforcement of standard treatment protocols and guidelines and the increased availability of infection control and risk reduction tools. As noted, these standards were often already in place but respondents noted that adherence was attributed to the HIV programme. The implementation of HIV and AIDS programmes has improved aspects of service delivery in the general health delivery system. More attention is being paid to counselling and to privacy and confidentiality. However, more work needs to be done in order to scale this up. The HIV programme is a good entry point but an integrated programme will be more sustainable in the long run.

HIV/AIDS programmes and effects on the support system

There are still large inequities between health services in Ghana's rural and urban areas, particularly with regard to infrastructure deficits in the northern part of the country (GMoH, 2010b). The HIV programme has helped to reduce these inequalities by improving infrastructure and providing equipment and laboratory capacity strengthening. These efforts have gone a long way toward strengthening capacity for health service delivery beyond any single programme.

Not only did the HIV and AIDS programme refurbish and supply equipment, it also developed the capacities of the laboratory staff in many underserved areas. In 2004, Ghana was known to have a deficit of laboratory technicians in eight of the 10 regions in the country. The HIV programme provided incentives for laboratory technicians to serve brief periods in these areas and paid for others to relocate. The HIV programme in Ghana has also trained laboratory staff in the use of new equipment. They are able to conduct more complex investigations, and collect and analyse data, which is not necessarily related to HIV or AIDS.

There were transfer benefits that arose in areas of management. The HIV programme provided an impetus for generating interest in effective stewardship, particularly in the areas of accountability, accounting and management capacity.

Perceptions as to the effect of the HIV and Aids programme on the workload of health professionals remains mixed. Ghana has a rather challenging health workforce profile. In 2001, it was estimated that only 6% of the total workforce worked in the three northern regions of Ghana (GMoH, 2006). Health care staffs are concentrated in urban areas. Forty-seven percent of the country's medical doctors worked in the two teaching hospitals and another 26% worked in the Greater Accra region. This acute mal-distribution has implications for any additional demands made on health staff.

As noted, there has been an increase in the number of people who use and access care at the health facilities which is largely attributable to the introduction of the National Health Insurance Scheme [NHIS] (Seddoh and Adjei, 2010). With the increasing workload and paper work requirements associated with the NHIS, the additional duties and reporting required for the HIV and AIDS programme naturally translates into a heavier workload. It is therefore a combination of different requirements rather than a single disease that is creating the workload situation. The situation, however, needs to be addressed as it can have negative effects for both the HIV programme and the health system in general.

Ghana tried to introduce an incentive system but efforts have produced few successes. In 2004, Ghana introduced the "additional duty hours allowance" to compensate for the generally low salaries that existed in the country (Ruwoldt, 2007). In 2005, the "hire purchase vehicle" scheme was introduced. Unfortunately, these failed to stem the migration of health personnel and did not help retain skills in any particular area.

There are, however, some positive lessons emerging from this study. For instance the innovative use of programme funds to provide accommodation for willing staff to deprived areas looks promising but its contribution to their retention in those areas needs to be studied in more depth. If it turns out to be positive it is worth looking for ways to replicate this by other programmes. Training opportunities under the HIV programme has also resulted in advancing the skills of health professionals and upgraded them to internationally recognised standards.

Stigma and attitudes

Awareness around HIV/AIDS has reduced to some extent the negative reactions and has contributed to the development of some protective policies. This is reflected especially in attention for the human rights of patients.

Stigma towards HIV/AIDS patients however is still a noticeable problem and cuts across a wide spectrum of the population. Among the respondents of all levels in society there was a common desire to fight the disease and provide comfort and services to those affected. District health management teams willingly allowed the private sector, NGOs, CSOs and CBOs to be involved in service delivery. A number of NGOs were contracted under the HIV programme to get involved in the health promotion and advocacy. This is widely acknowledged.

Planned Health systems strengthening through the AIDS programme

Although the resources brought in by the AIDS programme have contributed to health system strengthening, most of the planned effects were to be found in improved performance of the AIDS response and services targeted towards prevention, treatment and care of HIV and AIDS. Positive spin-off effects on the wider health system were observed when it came to the quality of care, staff attitude, infrastructure, accountability and planning and management capacity. Some of the effects could have been greater if the systems such as the M&E system had been set up in a more integrated way from the start.

6. Conclusion

In conclusion, it was observed that the HIV programme has influenced the health system both positively and negatively in Ghana. The AIDS programme has brought resources that had a catalytic effect towards provision of better services in other disease conditions. There are, however, real challenges that need to be addressed. The findings show that:

- HIV and AIDS in Ghana remains a disease of high priority, though respondents were not in agreement on the level of priority AIDS should be awarded in comparison to other health needs. The underlying reasons for addressing the AIDS epidemic in Ghana as one of the priorities needs to be more clearly articulated and the programmes will need to be designed to bring synergies to other programme areas.
- The HIV programme has contributed to health system strengthening. In particular, the programme has helped to improve infrastructure, equipment and laboratory services at various levels of the system. Management capacities have improved to promote transparency and accountability. However, the vertical planning and management of the AIDS programme has led to levels of fragmentation that prevented maximisation of the benefits of the potential positive synergies. Stakeholders will need to reach agreement on the key issues to be addressed in health systems strengthening and their implications and effect on work organisation at all levels.
- The interventions in training, redistribution of staff and infrastructure development particularly in the resource-poor areas of the country have increased service availability to the target populations beyond HIV/AIDS services to some extent, though community members in rural areas still feel they face difficulties in timely accessing good quality health services. Incentives paid to health staff by some organisations, however, have led to higher-pay expectations and unwillingness to perform certain duties without additional payment.
- The programme has introduced innovations in community mobilization and service delivery by promoting the use of patients directed service promotion. The engagement of NGOs and CSOs in service delivery in the HIV and AIDS is increased in Ghana. There is no clear indication within this study of the extent to which NGO and CSO engagement has also increased for health in general.
- The increase in general service utilization as a result of the introduction of the National Health Insurance Scheme in 2004 has meant a higher workload among the available skilled health workers. This is likely to affect the quality of HIV services that can be offered through established systems even though the NHIS does not cover AIDS patients. No comprehensive review has been conducted to assess the impact of this policy and the exclusion of HIV and AIDS from the coverage package.
- Finally, it is apparent that respondents appreciated the contribution of the HIV programme to general health system strengthening. However, to be sustainable and in order to reach its full potential, it needs to increase linkages and collaboration with other programmes within the country.

7. Policy implications and emerging issues

- HIV and AIDS continues to be a priority for the health sector especially with a view to further reduce HIV prevalence. However, it is important that all stakeholders reach agreement in terms of the level of priority in relation to other health priorities. Furthermore it is important that the aims and goals of the AIDS-specific response and its relation to the wider health system needs are well articulated and that resource allocation and priority setting is well understood by all stakeholders.
- The AIDS programme has contributed to specific health system strengthening activities, which otherwise may not have happened. In particular, it has improved laboratory quality, health information and financial reporting capacity. It has also led to the inflow of significant resources that helped fund cooperation with other disease programmes that are resource deprived. As most of these effects were aimed at improving the AIDS response rather than the wider health system and a certain level of fragmentation and parallelism was observed, there is need to investigate how the HIV programme can be developed to contribute in a more efficient way to promoting synergies in building the health system.
- Our study describes the contribution of the HIV and AIDS interventions as a part of a “vertical” programme towards strengthening of the wider health system reasonably well. However the question how to effectively build and sustain the synergies across multiple programmes to the benefit of the system as a whole remains unanswered. Understanding this will enable the sector to develop appropriate policies to better manage the programme and its contributions to entire system strengthening.
- Funds for earmarked programmes, such as those for HIV, have generously supported and improved laboratory infrastructure and equipment supplies and services. However, it is clear that these project-type funding mechanisms are not sustainable particularly because of their time-bound nature. There is a need to incorporate these advances in the HIV programme into the country health strategy. The same applies to improved systems for health information management, accounting and reporting. These “vertical” programme approaches should be integrated and be used to strengthen the government lead systems from the start.
- One of the strengths of the HIV programme is its performance-based financing system. This has created an increased level of accountability and transparency. This is a positive that should be looked at for scaling up of best practices to enhance the system.

Annex

Annex A: Distribution of interviewees

	Manya Krobo (A)		North Tongu (B)	
	KII's @ District (11) KII's @ Community (12)	FGD (6)	KII's @ District (6) KII's @ Community (9)	FGD (6)
District capital	Kpowornor	Odumase (2)	Mafi Tsetsekpo	Kpogede (2)
Sub-district level	Bellakope	Ayemersu (2)	Mafi Avedo	Kutime (2)
Remote	Gyakiti Krobo	Agatorm (2)	Melenu Dorfor	Kpomkpo (2)

Table 6: Overview of selected communities (and numbers of key informant interviews and FGDs)

District	National
<ol style="list-style-type: none"> District Health Director and other District Health Management Team members. Primary Health Care Facility Directors and Staff Private Midwives Malaria Control Officer NGO's Representatives District AIDS focal person Accountant GHS district Finance, Planning and Budget officer of Local Government District Coordinating Director (multisector coordination) 	<ol style="list-style-type: none"> MOH – 9 respondents GHS – 11 respondents Development partners and donors – 5 respondents NACP – 2 respondents GAC, - 1 respondent Coalition of health NGO's – 1 respondent CHAG – 4 respondents

Table 7: Profile of district and national level respondents

	Interview	FGD
National	1:15 (45-2+ hrs)	X
District	0:40 (30-1hr)	X
Community	0:30 (20-45)	1:45 (1:30-2:30)

Table 8: Interview Session lengths

2009	Interview	FGD
National	17 Sep – 9 Nov	X
District A	7 Dec – 11 Dec	X
District B	28 Dec – 31 Dec	X
Community A	24 Dec – 28 Dec	21 Dec – 23 Dec
Community B	29 Dec – 30 Dec	27 Dec – 29 Dec

Table 9: Data collection timing

	Interview	FGD
National	17	X
District A	11	X
District B	6	X
Community A	12	6 (8-10 people)
Community B	9	6 (8-10 people)

Table 10: Total Number of Interviews

References

Adjei, S. et al., 2010. *Evaluation of capacity development at district level of the health sector in Ghana (2006-2009): Evidence-based case study*; Centre for Health and Social Services, Accra, Ghana

Affordable Medicines Facility – Malaria (AMFm), 2010 *Report of the Forum on early Lessons from Implementation*. Accra, Ghana. Dec 2010

Asante A.F. & Fenny. A. P. (2008). *Ghana National AIDS spending assessment 2007. Level and flow of resources and expenditures to confront HIV and AIDS*. Ghana , Accra, Institute of Statistical, Social and Economic Research (ISSER), University of Ghana. Prepared for the Ghana AIDS Commission (GAC) and the Joint United Nations Programme on HIV and AIDS (UNAIDS).

Biesma, R.G. et al., 2009. The effects of global health initiatives on country health systems: a review of the evidence from HIV/AIDS control. *Health policy and planning*, 24(4), pp.239-52

Centre for Health Information Management (CHIM, 2009). *Ghana Health Service 2009 Fact Sheet*.

Christian Health Association of Ghana (CHAG), 2010. Annual report 2009, Ghana

Commission on HIV/AIDS and Governance in Africa, "Africa: The Socio-Economic Impact of HIV/AIDS", http://www.uneca.org/CHGA/doc/SOCIO_ECO_IMPACT.pdf

England, R., 2009. Lessons and Myths in the HIV/AIDS Response. *The Lancet*, 374(9702), p.1674

Ghana Aids Commission (GAC), 2010. Ghana's Progress report on the United Nation's General Assembly Special Session (UNGASS) Declaration of Commitment on HIV and AIDS, Reporting period January 2008 to December 2009. Ghana Aids Commission

Ghana Health Services (GHS), 2009. *Annual Report 2009*. Accra, Ghana

Ghana Ministry of Health (GMOH), 1996. *Ghana Health Sector 5-year Programme of Work (POW) 1997-2001*. Accra, Ghana

Ghana Ministry of Health (GMOH), 2001. *The Health of the Nation, Reflections on the First Five Year Health Sector Programme of Work 1997-2001*. Accra, Ghana, Ministry of Health.

Ghana Ministry of Health (GMOH), 2002. The second health sector 5 year programme of work 2002-2006. 'Partnerships for Health: Bridging the Inequalities Gap'. Accra, Ghana, Ministry of Health.

Ghana Ministry of Health, 2006. *Review of Ghana health sector programme of work: Reports from 2001 to 2005*. Accra, Ghana.

Ghana Ministry of Health (GMOH), 2007a. Ghana Health Sector Five Year Programme of work (POW) 2007-2011, Creating Health through Wealth. Ghana Health Services Accra, Ghana, Ministry of Health.

Ghana Ministry of Health (GMOH), 2007b. *Human Resource Policies and Strategies for the Health Sector 2007-2011*. Accra, Ghana

Ghana Ministry of Health (GMOH) (2009). *The Ghana Health Sector 2009 Programme of Work; Change for Better Results: Improving Maternal and Neonatal Health*, Accra, Ghana, Ministry of Health.

Ghana Ministry of Health (GMOH) (2010), *Annual Health report 2009*. Accra, Ghana, Ministry of Health

Ghana Ministry of Health (GMOH) (2010b), *The Health Sector Medium Term Development Plan 2010 – 2013: Accelerating programmes implementation towards attaining equitable universal coverage*. Accra, Ghana

Ghana Statistical Service (GSS) Ghana Health Service (GHS), 2004. 2003 *Ghana Demographic and Health Survey Report*. Accra, Ghana, Ghana Statistical Services and Ghana Health Services

Ghana Statistical Service (GSS), Ghana Health Service (GHS), and ICF Macro (2008). *Ghana Demographic and Health Survey 2008*, Accra, Ghana: GSS, GHS and ICF Macro

Ghana Statistical Services (GSS), Ghana Health Service (GHS), and Macro International, 2009. *Ghana Maternal Health Survey 2007*. Claverton, Maryland, USA: GSS, GHS and Macro International.

Government of Ghana (GoG), 2008. Management Accountability Framework (MAF) for Maternal Health 2008. Accra, Ghana

Government of Ghana (GoG) and United Nations Development Program (UNDP), 2006. *Country Programme Action Plan 2006-2010*. Accra

Marchal, B., Cavalli, A. & Kegels, G., 2009. Global Health Actors Claim to Support Health System Strengthening - Is This Reality or Rhetoric? *PLoS medicine*, 6(4), p.e1000059.s

National Aids/STI Control Programme (NACP) and Ghana Health Services (GHS), 2007. *Estimates and Projections of National HIV prevalence and Impact in Ghana using Sentinel Surveillance Data adjusted with DHS+ Data*. Ghana, Accra

National Aids/STI Control Programme (NACP), 2011. *Annual Report 2010*. Accra Ghana

National Aids/STI Control Programme (NACP), 2010. *Annual Report 2009*. Accra Ghana

NMCP, 2009. *Malaria Annual Report*. National Malaria Control Programme of Ghana. Accra

Ruwoldt, P. et al., 2007. *Assessment of the Additional Duties Hours Allowance (ADHA) Scheme: Final Report*, The Capacity Project and the Ghana Ministry of Health. Dec 2007.

Sachs, J.D. & Brundtland, G.H., 2001. *Macroeconomics and Health: Investing in Health for Economic Development*. Report of the Commission on Macroeconomic and Health. Geneva: WHO.

Seddoh, A. and Adjei, S., 2010. *The Contributions of the HIV/AIDS programme to health system strengthening in Ghana*. News Agency, Accra, and Centre for Health and Social Services (CHeSS) (March 31, 2010)

Tawfik L, & Kinoti S.N., 2003. *The impact of HIV/AIDS on health systems and the health workforce in sub-Saharan Africa*. Washington DC: Support for Analysis and Research in Africa (SARA) Project, USAID, Bureau For Africa, Office of Sustainable Development; 2003

The Commission on HIV/AIDS and Governance in Africa. *Africa: The Socio-Economic Impact of HIV/AIDS*. Available at: http://www.uneca.org/CHGA/doc/SOCIO_ECO_IMPACT.pdf (accessed 28th April 2011)

The General Assembly of the United Nations, 2001. *Declaration of Commitment on HIV/AIDS*,

Travis, P. et al., 2004. Overcoming health-systems constraints to achieve the Millennium Development Goals. *The Lancet*, 364(9437), pp.900-906.

UNAIDS, 2010. *UNAIDS Report on the Global AIDS Epidemic 2010*. Joint United Nations Programme on HIV/AIDS (UNAIDS), Available at: <http://www.unaids.org/globalreport/> (accessed 28th April 2011)

United Nations. June 2001. *Declaration of Commitment on HIV/AIDS*. United Nations General Assembly Special Session on HIV/AIDS, pp.25-27. New York: United Nations. Available at: http://data.unaids.org/pub/report/2002/jc668-keepingpromise_en.pdf

UNICEF, 2006. *Ghana's Integrated Child Health Campaign 1-5 Nov 2006*. www.unicef.org/media/files/Ghana_Integrated_Health_Campaign.pdf (accessed 22 Apr 2011)

UNDP, 2010. *Unlocking Progress: MDG acceleration on the road to 2015. Lessons from the MDG Acceleration Framework Pilot countries*. United Nations Development Programme, New York, USA.

WHO, 2007. *Everybody's Business - Strengthening Health Systems to Improve Health Outcomes*. WHO's Framework for Action. Geneva: WHO

WHO eds., 2008. *Maximizing Positive Synergies between Health Systems and Global Health Initiatives*. In *Report on the Expert Consultation on Positive Synergies between Health Systems and Global Health Initiatives*, WHO, Geneva, 29-30 May 2008. World Health Organization, Geneva.

WHO, 2009a. *The World Health Report 2008, Primary Health Care - Now More Than Ever*. World Health Organization, Geneva, 2009.

WHO, 2009b. *An Assessment of Interactions between Global Health Initiatives and Country Health Systems*. *The Lancet*, 373(9681), pp.2137-2169



Royal Tropical Institute
KIT Development Policy & Practice



Centre for Health & Social Services