

AMREF Discussion Paper Series

More than Facts and Figures: Effectiveness of AMREF's HIV and AIDS Interventions

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Discussion papers are aimed at presenting evidence to inform and solicit discussions on a wide range of topical issues related to health and development interventions.

ABBREVIATIONS AND ACRONYMS

ABCD	Abstinence, Being faithful to one partner, Condoms and Development
AFXB	Association Francois Xavier
AIC	AIDS Information Centre
AIDS	Acquired Immuno Deficiency Syndrome
AMREF	African Medical and Research Foundation
AMS	African Mining Services
ANC	Ante-Natal Care
ANNEA	AIDS National Networks of East Africa
ART	Antiretroviral Therapy
ARVs	Antiretrovirals
ASO	AIDS Services Organisations
BCC	Behaviour Change Communication
CADRE	Centre for AIDS Development, Research and Evaluation Cancer Association of South Africa
CBO	Community-Based Organisation
CCBRT	Comprehensive Community Based Rehabilitation in Tanzania
CCM	Country Co-ordinating Mechanism - Uganda
CDC	Centres for Disease Control
CHAP	Canners HIV/AIDS Project
CHE	Community Health Educator
CHIC	Community Health Information Centre
CHW	Community Health Worker
CORD	Catholic Organisation for Relief and Development
CSW	Commercial Sex Worker
DANIDA	Danish Agency for International Development
Dfid	Department for International Development
EAC	East African Community
EJAF	Elton John AIDS Foundation
FAMSSA	Family and Marriage Society of South Africa
FATE	Fight AIDS Together in Ethiopia
FBO	Faith-Based Organisation
FHI	Family Health International
FPI	Family Preservative Initiative
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GGM	Geita Gold Mining Limited
GLIA	Great Lakes Initiative on AIDS
GMHP	Geita Mine Health Project
HAART	Highly Active Antiretroviral Therapy
HAPAC	HIV/AIDS Prevention and Care
HAPCO	HIV/AIDS Prevention and Control Office
HBC	Home Based Care

HBCW	Home Based Care Worker
HENNET	Health NGOs Network
HHI	HAART 'n' Harvest Initiative
HIDC	Humanistic Institute for Developing Countries
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
ICPD	International Conference on Population and Development
ICRH	International Centre for Reproductive Health
IEC	Information Education and Communication
IGA	Income Generating Activity
IRAPP	Institute for Regional Analysis and Public Policy
JAPR	Joint Annual Programme Review
JCRC	Joint Clinical Research Centre
KAP	Knowledge Attitude and Practices
KAPC	Kenya Association of Professional Counsellors
KMAHCOP	Kitovu Mobile AIDS Homecare, Counselling and Orphans Programme
KNH	Kindernothilfe
KUAP	Kisumu Urban Apostolate Programme
LSHTM	London School of Hygiene and Tropical Medicine
LWR	Lutheran World Relief
MDR	Multi-Drug Resistance
MSF	Médecins Sans Frontières
MSM	Men who have Sex with Men
MTCT	Mother to Child Transmission
MUFHS	Moi University Faculty of Health Sciences
NACC	National AIDS Control Council
NACOSA	National AIDS Commission of South Africa
NACP	National AIDS Control Programme – Tanzania, Uganda
NASCOP	National HIV/AIDS and STD Programme – Kenya
NEQAS	National External Quality Assessment Scheme
NGO	Non-Governmental Organisation
NIMR	National Institute for Medical Research – Uganda
NORAD	Norwegian Agency for Development Co-operation
NTRL	National Training Resources Limited
OI	Opportunistic Infection
OVCA	Orphans and Vulnerable Children Archdiocese
OVCs	Orphans and Vulnerable Children
PEPFAR	Presidential Emergency Plan For AIDS Relief
PLHIV	People Living with HIV
PLWHA	People Living with HIV and AIDS
PMTCT	Prevention of Mother to Child Transmission
PSI	Population Services International
REACH	Rapid and Effective Action Combating HIV/AIDS
REQAS	Regional External Quality Assessment Scheme

SADF	South Africa Development Fund
SANAC	South African National AIDS Council
SATT	Southern AIDS Training Trust
SHDEPHA	Service Health Development for People Living with HIV and AIDS
SME	Small and Medium scale Enterprise
STI	Sexually Transmitted Infection
TAC	Treatment Action Campaign
TACAIDS	Tanzanian Commission against AIDS
TALC	Teaching-aids at Low Cost
TASO	The AIDS Support Organisation
TBA	Traditional Birth Attendant
TLP	Treatment Literacy Practitioner
UK	United Kingdom
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	Voluntary Counselling and Testing
VHC	Village Orphan Committee
VOR	Village Orphan Representative
WHO	World Health Organisation
WOFAK	Women Fighting AIDS in Kenya

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EXECUTIVE SUMMARY

Since 1984, the African Medical and Research Foundation (AMREF) has accumulated a rich repository of knowledge products from its HIV and AIDS interventions. To assess the organisation's contribution to HIV and AIDS responses in Africa requires that we move beyond the accumulation of data, figures and facts found in the numerous monitoring and evaluation reports from independent project to evidence based on systematic analysis across projects and countries. This paper documents the relevance of these interventions to AMREF's corporate strategy, their impact on beneficiaries, as well as best practices.

Heterogeneity of HIV and AIDS interventions from Ethiopia, Kenya, South Africa, Tanzania and Uganda informed a three-part methodology: (1) a general global review of evidence on effectiveness of interventions; (2) a summary of evidence from published and

unpublished sources of data and information sources using the logical framework format; and finally (3) a synthesis of findings at project-level within and across countries using a comparative framework.

Synthesis of AMREF's diverse HIV and AIDS interventions shows that the organisation is operating in the right place and with the right scope with regard to its mission (disadvantaged, marginalised and vulnerable regions and target groups), national strategic priorities and the MDGs. The Foundation should improve on project duration given that behavioural interventions are long-term, yet most projects averaged a 3-year funding cycle.

AMREF's strategies span the entire continuum of prevention, care and support at individual, community and institutional levels. Projects include, Angaza VCT and Mema kwa Vijana, which model behavioural interventions, other initiatives with commercial sex workers, PLHIV and OVCs which promote sustainable livelihoods, grant-making to build capacity of CSOs, and developing policies and mainstreaming HIV and AIDS in diverse environments.

AMREF's HIV and AIDS interventions averaged a 90% success rate for immediate objectives (output level). However, fewer projects measured effectiveness defined by project outcome and impact indicators. Several reasons explain this scenario – donor-defined project duration, project designs inconsistent with outcome and impact measuring indicators.

AMREF is an innovator and change agent but its sphere of influence has focused on policy and less on institutionalising practices and processes. AMREF partners with over 600 organisations and is well represented on various national and regional boards, elevating the organisation's status as a policy-influencing partner. However, the comparative advantage in terms of practices is weak even within AMREF's own projects due to the slow diffusion of best practices. AMREF should improve its quality of documentation and data management to move beyond project outputs to assessment of outcomes and impact as measures of effectiveness; use GIS technology to map project sites, monitor population coverage, and invest in institutionalisation of practices and long-term programming that integrates the three pillars of AMREF's mission in each programme.

1.0 INTRODUCTION

AMREF pursues its mission through a holistic three-pronged systems approach. This entails building the capacity of individuals, communities and community-based organisations to promote better health; building sustainable partnerships with communities and other stakeholders that strengthen health systems to deliver quality health care; conducting operational and health systems research and advocating for policy change and practice. AMREF serves disadvantaged communities such as the poorest, marginalised, and vulnerable sub-populations through partnerships with governments and other non-governmental institutions interested in health development. The target groups include children, women, the elderly, persons with disabilities, those living in under-served rural nomadic and urban slum communities, as well as those most affected by emergencies and disasters.

The broad areas of intervention include HIV and AIDS and TB, family health, safe water and basic sanitation, clinical outreach, disaster and emergency services, malaria, training and health learning materials. HIV and AIDS programming is the largest and accounted for 36% of the overall annual budget in AMREF by 2008.

The rationale for AMREF's HIV and AIDS initiatives has evolved over time and across countries. The main catalysts include evidence of high HIV prevalence rates, high-risk population sub-groups, the impact of the epidemic on already improvised health care systems, for example, bed-occupancy and depleted human-resource. Most interventions in the health sector have not succeeded in adequately addressing the problem of access by the poor and vulnerable in society. Thus, AMREF continues to search for viable options to increase demand for and supply of quality services for HIV and AIDS prevention, care and support.

This paper uses various approaches to review literature on responses to HIV and AIDS; synthesize AMREF's experiences and compare the evidence within and across five countries, namely Kenya, Uganda, Tanzania, South Africa and Ethiopia. This triangulation of approaches allows for several outputs. One, to determine the type of interventions and whether these interventions are in line with AMREF's strategy, community's expectations as well as national strategic plans on HIV and AIDS. Two, identify and document the best practices that can be shared and scaled up; and finally to examine the gaps and areas that need to be strengthened in programming, research, policy and practice.

1.2 Summary of international responses to HIV/AIDS prevention, care and support

HIV and AIDS is a developmental and human rights problem whose determinants are anchored in a myriad of biological, physical, socio-demographic, economic, cultural, psychological, political and legal factors that drive the epidemic. The complex interactions among these factors acting at individual, community and institutional levels frustrate efforts to find consistent and effective responses to management of the HIV and AIDS epidemic in sub-Saharan Africa. This complex environment typifies the epidemic into distinct waves or series of epidemics with unique drivers and responses. The heterogeneity in the timing and tempo of the spread of the epidemic, as well as the peaking and stabilisation of these waves of the epidemic challenges researchers to continually explore and test new interventions, as well as to continually evaluate whether previous interventions are still effective, efficient and sustainable. There is a general agreement that engaging partners across all development sectors creates synergy to address HIV and AIDS issues within a multi-sectoral and multilevel approach (Rehle, T *et al* 2006).

The scope and magnitude of the HIV and AIDS problem in sub-Saharan Africa where heterosexual transmission still accounts for over 80% of adult HIV infections, is well documented. Classification of HIV and AIDS interventions has previously been based on single criteria such as the setting of the intervention or combining various criteria activities, service, commodity and outcomes. A typology based on intervention setting suggests three types of interventions: institution-based programmes such as workplace, school or clinic; community-based interventions targeting various sub-groups; and population-based interventions such as mass media campaigns. A more comprehensive classification adopted by UNAIDS and WHO recommends three major interventions based on activities, service, commodity and outcomes, namely behavioural, socio-developmental and health or biomedical interventions (IASC, 2004; WHO, 2006; UNAIDS, 2008). In this paper, we adopt the more comprehensive classification framework.

Behavioural interventions aim to change individual behaviours only without any direct attempts to change the norms of the target community. Examples of safer sexual behaviour include abstinence, fidelity, condom use when having sex damage and disease control. The last factor comprises delay of sexual activity, limiting the number of partners, seeking treatment for STIs, and not having sex while infected with an STI or when there is damage to the genital skin or mucous membranes.

The educational component covers mass media, community sensitisation and mobilisation for VCT, peer education for PLHIV, sex workers, workplace and school-based education.

Socio-developmental interventions aim to change livelihoods of the target groups by influencing the general socio-economic, cultural and environmental conditions, primarily to promote positive behaviour and improve access to biomedical interventions (IASC, 2004; UNAIDS, 2008). Examples include (1) use of social infrastructure, policy, administrative, managerial and medico-legal frameworks to influence power relationships embedded in social and peer norms which affect access to resources, (2) empowerment through income-generating projects, community mobilisation, diffusion, building networks, and infrastructural developments for transport and communication, as well as resource support, and (3) mandatory and formal educational programmes that change norms towards sustainable livelihoods.

Finally, interventions at health service level include administrative, managerial and medico-legal decisions that influence quality and safety of biomedical interventions provided (IASC, 2004; UNAIDS, 2008). These include clinical services that reduce the risk of HIV and other STI infections such as management of sexually transmitted infections, opportunistic infections, PMTCT services, PEP, highly active antiretroviral therapy (HAART), safety in care of PLWAs, male circumcision, condom distribution in public settings, blood screening, needle exchange programmes, microbicides and vaccine development initiatives.

Effectiveness of interventions

Knowledge that HIV infections are preventable is indisputable. What is debatable is the effectiveness of the arsenal of prevention interventions. In particular, evidence on effectiveness of behavioural interventions is mixed and any attempts to interpret the findings should be cautious for several reasons (WHO, 2006). One, there are few behavioural interventions that are experimental, thus limiting the scope of any meta-analysis and leaving the bulk of the evidence to be adduced from self-reported change in behaviour. Two, measures of behavioural interventions are inconsistent across projects, regions and countries. Three, the multiple outcomes of behaviour change make it not only difficult to generalise the findings, but also to disentangle or attribute any shift in behaviour to a specific intervention. Finally, behavioural interventions may influence more than one population sub-group in a particular setting, making it difficult to ascertain scalability of the initiative.

There are several models seeking to explain behaviour change. These include AIDS risk reduction model (Catania, Kegeles and Coates, 1990); diffusion of innovation model (Rogers E, *et al*, 2002); health belief model (Rosenstock *et al*, 1994), theory of reasons action (Fishbein *et al*, 1994);

social cognitive theory (Bandura, 1997; Glanz K. *et al*, 2002); and stages of change model (Prochaska, DiClemente and Norcross, 1992). None of these models are sufficient; however, they strive to explain pathways through which individuals are believed to acquire the right knowledge, right skills and right attitude to act and maintain safe practices for HIV prevention. The challenge with behaviour change communication is sustaining the behaviour change, follow-up interactions and emerging misconceptions. The positive correlation between levels of knowledge and awareness and positive behaviour change towards safe sex practices is undeniable. However, over the last ten years, evidence from Demographic and Health Surveys and AIDS Indicator Surveys in sub-Saharan countries confirms that levels of knowledge on the transmission and prevention of HIV and on the AIDS epidemic are very high (over 80%) yet, safe sex practices are dubbed the 'knowledge-behaviour' gap (DHS – Kenya, 2003 Uganda, 2005, Tanzania 2007). This means that effective behaviour change may lead to containing and reducing the epidemic (prevalence) as has happened in Uganda or stopping the spread through new infections (incidence) as witnessed in Senegal. These contradictions are supported by findings from two community-randomised trials in Tanzania (Hayes R *et al*, 2005) and the weak link between treatment of STIs and reduction in HIV incidence in Uganda (Kamali A *et al*, 2003).

A summary of systematic reviews reveals that mass media interventions have immediate effects in promoting voluntary HIV testing but has no long-term effects. Utilisation of VCTs in communities with high HIV prevalence is relatively low. Interestingly, studies on the role of VCT programmes in reducing incidence and prevalence of HIV at population level offer mixed results. The few randomised control trials conducted on VCT interventions showed negative behaviour outcomes for individuals who tested negative the first time (Corbett *et al*, 2007). Coupled with the fact that only a small proportion of the infected are aware of their HIV status, it means that millions of people may unsuspectingly be passing on the virus to generations of young Africans. Uganda, Kenya and Tanzania, among others are rolling out door-to-door community-level VCT interventions aimed at influencing norms and stigma at community rather than individual level. One caveat, the community must be analysed so that different behaviour change communication interventions target different individuals along the continuum or stages of behaviour change.

Abstinence only interventions have been shown to be ineffective in decreasing HIV risk behaviour among the youth in developed countries, except for the USA (Underhill K. *et al*, 2007).

However, it is one of the well-funded interventions under the US President's Emergency Plan for AIDS Relief (PEPFAR) and there is need for more trials

comparing abstinence-only and abstinence-plus interventions in Africa. Indeed, the claim that the ABCD approach explains 50% to 90% of the observed decline in HIV prevalence in Uganda over the last 15 years has been disputed on the basis of lack of systematic evidence separating and mapping out the range of interventions under this approach. Those arguing against the dominance of behaviour change assertion offer an alternative explanation – the natural dynamics of the epidemic such as mortality, which together with behaviour change would be a more plausible explanation for the decline in HIV prevalence. More challenges are emerging from DHS and AIDS Indicator Surveys suggesting resurgence in HIV infections due to reversal in behavioural interventions. As one study revealed (Shuey D *et al*, 1999), age at first sexual intercourse may drop and then increase for both males and females after some years, yet the HIV incidence rate may remain the same during the same period. Evidence that consistent and correct condom use reduces the spread of HIV infection among other STIs is well documented, yet rates of condom use are still very low.

Studies on the effectiveness of most biomedical interventions record slow progress as large-scale population level experimental studies with complex ethical issues are often required to document clearly the benefits for preventing HIV and other STI infection. Interventions such as HAART, PMTCT, PEP, treatment of opportunistic infections and male circumcision have been more successful than those aimed at development of vaccines and microbicides. Some studies have demonstrated that microbicides have no effect on prevention of HIV infection while others show that an intervention such as nonoxynol-9 can cause harm by increasing genital lesions (Wilkinson D, *et al*, 2002; Van Damme *et al*, 2002). Systematic reviews involving multi-site studies of the interventional effect of male circumcision for preventing HIV by men found that results from population randomised control trials in India, South Africa and more recently in Kenya and Uganda reveal strong protective effects of male circumcision ranging from 38% to 70% (Weiss, H *et al*, 2000; Bailey, S *et al*, 2007).

Treatment of STIs for prevention of HIV infection prevention is routinely recommended for youth and adult populations. Studies have shown that the likelihood of being HIV positive was five times higher among men and eight times higher for women with type 2 herpes simplex virus than those who were not infected with HSV-2 in South Africa (Weiss H, *et al*, 2001). The gender divide persists even in the absence of another STI as revealed in a study comparing HIV prevalence in two cities in Kenya and Zambia (Glynn *et al*, 2001) where the rates in women were six times higher than in men aged 15-19 years, but about three times higher for older age groups.

With respect to socio-developmental interventions, poverty and gender issues have become defining features of HIV and AIDS programming. Education has remained a catalyst for improving socio-economic conditions and cultural attitudes of individuals and communities. Economic empowerment through income-generating activities such as micro-credit financing and merry-go-rounds reduce poverty-linked inequalities thereby improving access to services that promote safe behaviour. Social capital is emerging as one of the key determinants of behaviour change at individual, family and community level as revealed by the qualitative study by Ware and others (2009). Peer-based interventions at school, workplace, and special population groups aim to provide psychosocial support to peers and PLHIV to reduce inequalities in health outcomes, evidence suggests benefits of self-care, such as consistent condom use, due to improved social support but limited long-term effects. Studies have demonstrated the limited effects of using treatment buddies to improve ART adherence. The effectiveness of a social intervention is in part dependent on the context of its implementation.

Over the last 15 years, HIV and AIDS programmes in sub-Saharan Africa have been very well funded, pulling resources away from other priority and more common health problems such as malaria, and therefore reducing the viability for sustainably managing the epidemic through the 'crowding-out' effect. Vaccine development initiatives have not borne fruit yet and are not likely to do so in the near future despite the disproportionate levels of funds invested in this one intervention. For this reason, among others, most agencies advocate for and promote integrated and comprehensive care rather than stand-alone programmes. The core components of comprehensive care services include: voluntary and confidential counselling and testing for HIV infection; prevention of HIV transmission including sexual and mother to child transmission; prophylaxis against opportunistic infections; diagnosis and treatment of HIV-related conditions including opportunistic infections and neoplasms; antiretroviral treatment; and palliative care. However, treatment interventions and especially funding for AIDS vaccine initiatives still receive the bulk of the funds despite some disappointing results in the recent past (AIDS Vaccine Advocacy Coalition, 2004).

1.3 Summary of country responses to HIV and AIDS prevention, care and support

This section, describes five country-level profiles namely Ethiopia, Kenya, South Africa, Tanzania and Uganda. The accounts cover when the first case of HIV was diagnosed, the background economic and socio-demographic characteristics, trends in HIV prevalence, as well as HIV and AIDS policies adopted in each of these countries.

ETHIOPIA: The first HIV case known through laboratory testing in 1984 was reported in 1986. With a population of over 76 million spread across 1,127,127m², life expectancy was estimated at 49 years in 2007, and about 39% of the population lives below the poverty line. Ethiopia is divided into nine regions namely Afar, Amhara, Benishangul Gumuz, Gambella, Harari, Oromiya, Somali, Tigray and Southern Nations, Nationalities and Peoples administered from Addis Ababa or Dira Wawa.

Administratively, Addis Ababa the capital city is divided into 10 sub-cities, which are further divided into 99 units of decentralisation, locally known as *kebeles*. Increasing poverty is driving more people to the slums, thus increasing those who are at risk of HIV infection. The number of street children and orphans in the sub-cities was estimated at 40,000 and 79,000 people in 2004, respectively.

In 1996, the country established the sentinel surveillance in Addis Ababa to monitor HIV prevalence among antenatal care (ANC) attendees and the "AIDS in Ethiopia" series to report and communicate on the pandemic's progress. The series placed the prevalence at 7.3% in 1999 and 6.6% in 2001. Since then, the Ministry of Health has operated with the figure of 6.6%, although the 2005 DHS revealed that HIV prevalence among 15 to 49 year olds was 1.4% (about 1 million people) and 5% for the ANC attendees. According to Hladik *et al*, (2004) the country faces a generalised and expanding epidemic whose incidence, estimated at 0.26% in 2005, levelled out in the mid-1990s, but began to rise again from 2001.

However, this average conceals large urban and socio-demographic differentials. The urban prevalence had declined from 12.6% to 6% between 2003 and 2005 compared to the estimate for the rural prevalence which dropped from 1.9% to 1%. Addis Ababa, the capital city, has a prevalence of 12.4% with high variations across the sub-cities ranging from 3% to 15% in Addis Katema. Gender differences are equally dramatic with women having a higher prevalence, which has increased from 3.8% to 5% while that for men increased from 0.9% to 3.8% between 2003 and 2005. Like other sub-Saharan countries, women compared to men aged 15 to 49 years have lower levels of knowledge on abstinence (40% to 64%), fidelity (60% to 80%) and condom use (40% to 64%). Interestingly, only 1% women compared to 4% men reported having had sex with more than one partner one year prior to the DHS survey. Similarly, among ANC attendees, the prevalence had reduced from 13% in 1997 to less than half in 2005 (5%) according to the fifth series of 'AIDS in Ethiopia' report (2004). Only 13% of those who need ARVs have access to them.

The response of the Federal Government has been encouraging. The National AIDS Programme in the Ministry of Health and the National AIDS Council were established in 1987 to co-ordinate multi-sector initiatives, including civil society efforts. Surveillance began in 1989 and a national strategic plan to combat HIV and AIDS was launched in 1999. A National HIV and AIDS Resource Centre, opened in 2003, is key to stakeholders accessing timely and accurate information on the epidemic. The priority intervention areas according to the strategic plan were IEC/BCC, condom promotion and distribution, VCT, management of STIs, blood safety, universal precautions, PMTCT, care and support for PLHIV and OVCs, legislation and human rights, surveillance and research, monitoring and evaluation and mainstreaming.

The government set up a National AIDS Council (NAC) secretariat in 2000. This has evolved to the current HIV/AIDS Prevention and Control Office (HAPCO), which was established in 2002 to facilitate co-ordination, networking and implementation of the "Three Ones" principles of having: One National Action Framework, One Co-ordination Authority, and One Monitoring and Evaluation Framework under the broad mandate to co-ordinate and determine the strategic direction for the nation's response to the HIV and AIDS pandemic. In 2004/5 a task force was set up to co-ordinate provision of free, integrated, ARV treatment. Despite these achievements, the following challenges continue to affect effectiveness: lack of co-ordination, low community participation and empowerment, growing demand for VCT and ARVs against an inadequate capacity to deliver services and rapid expansion of the epidemic to rural areas that have traditionally had low HIV prevalence. The strategic plan emphasises provision of VCT, PMTCT and treatment of cases, and provision of care and support to all including children and high-risk groups.

KENYA: The first clinical case was diagnosed in Nairobi in 1984. The national prevalence peaked in the late 1990s and levelled out in 2003 before showing a notable decline to 5.1%. According to the DHS (2003) and the AIDS Indicator Survey (2007), the prevalence is at 7.1% with significant variations at provincial level, ranging from 3% in North Eastern to 15% in Nyanza. This means that about 1.2 million to 1.5 million people aged 15-49 years are infected. The prevalence is higher in urban areas (670,000) compared to rural areas (410,000) and nearly twice as high among women (8.7%) than among men (4.5%). The peak for women is also earlier at age 25-29 years compared to men which is over 35 years. The prevalence among pregnant women has not changed considerably and the country has about one million OVCs due to HIV and AIDS.

The economic decline in the 1980s and 1990s increased individual and household poverty thereby crippling the health systems and impeding efforts to provide quality health care services.

The introduction of user fees worsened the health indicators. The average population living below the poverty line is about 58% with major variations between provinces and districts. Additionally, about 47% of the population is food insecure. The poorest regions with high HIV and AIDS as well as malaria burden are Nyanza, North Eastern, Coast and Western provinces. HIV prevalence rates of 35% have been noted in Kisumu (2000) and Suba (2002) districts. The urban poor will become more vulnerable if these declining trends in socio-economic indicators persist.

It took 15 years, from the time the first clinical case was diagnosed, before the Kenyan government declared AIDS a national disaster in November 1999. With the establishment of the National AIDS Control Council (NACC) in 1999, Kenya demonstrated commitment to implementing the "Three Ones" principles. NACC adopted a multi-sectoral approach and has developed two strategic plans; the first was for the period 2000 to 2005 and the second 2005/2006 – 2009/2010. With the legal framework in place, the NACC has since established over 200 Constituency AIDS Committees (CACs) under the decentralised approach.

At the outset, these policies look robust and relevant, but their implementation has been fraught with challenges of ineffective co-ordination of funding initiatives, weak accountability and monitoring systems leading to yet more declarations such as "Total War on HIV/AIDS" in 2003 and another committee established to deal with HIV/AIDS as an emergency. In the same year, the government enacted the National Condom Policy and Strategy to improve education and access to prevention strategies. Compared to the government, NGOs provide most of the care and support for HIV (85% to 64%), home-based care (25% to 17%) and ART services (20% to 5%).

The current plan focuses on prevention of new infections, improvement of quality of life of the people infected and affected and mitigation of socio-economic impact of HIV and AIDS guided by six principles: (1) multi-sectoral, (2) integrated, (3) evidence-based, (4) mainstreaming of HIV and AIDS activities, (5) targeted interventions for vulnerable groups including women and children, and (6) meaningful engagement of PLHIV and empowerment of stakeholders such as the community. The recently adopted Community Health Strategy anticipates a major role of NGOs in its implementation. The strategy acknowledges that communities are the foundation of affordable, equitable and effective health care.

Funding requirements for Kenya's HIV and AIDS programme rose from US\$ 338 million in 2005/06 to US\$ 605 million in 2009/10. In 2007, the budget allocation (US\$ 127 million plus an additional US\$ 15 million from the UN) was distributed as follows: 30% went to mitigation of socio-economic impacts, 29% on quality of life including treatment, 24% for prevention of new infections and 17% for support services.

NACC has made gains in reducing HIV prevalence from 9% in 1990 to 6.9% in 2003 and 5.1% in 2006. However, coupled with the recent reversal in trends, the body continues to face key challenges including a weak monitoring and evaluation framework, lack of capacity building and heavy dependence on donor funding that are unreliable and tend to be restricted to specific interventions. On average, deaths from AIDS continue to outstrip new infections since 1999 despite the continued decline in new infections, estimated at 60,000 per annum in 2005. This shows that there is still need to scale up both prevention and treatment. HIV and AIDS programming has not effectively addressed the poverty gaps. The cost of ARVs is US\$ 53 a month yet 58% of Kenyans live on less than US\$ 30 per month. Although public resources are limited, development partners alleged that in 2000 the government failed to distribute US\$ 54 million for HIV and AIDS projects due to inefficiency. In self-defence, the government argued that the delays were due to restrictive conditions for managing the money set by the World Bank and International Monetary Fund (IMF).

There is urgent need to focus prevention strategies on high-risk groups such as men who have sex with men (MSM), prisons, fishing communities and clients of commercial sex workers (CSWs). Finally, the geographic, place of residence and socio-demographic differences, including gender, in prevalence of HIV in Kenya have not been adequately addressed. Improving monitoring mechanisms and disaggregating data at the lower level (unit of decentralisation) to inform research and policy design on these dynamics is crucial if the Millennium Development Goals (MDGs) are to be realised. Longitudinal surveys are more appropriate for focusing on incidence but also understanding the complex set of factors affecting HIV and AIDS in Kenya.

SOUTH AFRICA: The government's response to the HIV and AIDS epidemic can be divided into five phases. First, between 1982 and 1988 when there was denial and finger pointing after the first cases were revealed to the public. Second, from 1989 to 1992 when legal challenges framed HIV and AIDS as a human rights issue. Third, from 1992 to 1994 when the National AIDS Control Programme in South Africa was established to co-ordinate policy development and prioritise interventions. The programme developed the first National AIDS Plan in 1994. Fourth was the Mandela period (1994-1998) which ushered in a period of silence leading to a crisis

of implementation due to poor resource commitment, co-ordination, and ineffective leadership at the AIDS council to guide debates on ART and confidentiality issues. Fifth was the Mbeki era (1999-2008), preceded by negative international publicity the country faced due to the president's position and interpretation of the context of the HIV and AIDS problem. Civil society became more engaged in addressing the problem and specifically made efforts to address the issue of poor access to drugs through advocacy and by providing clear leadership through the National Strategic Plan (2000-2005). The established South African National AIDS Council (SANAC) and National AIDS Commission of South Africa (NACOSA) were initially passive and the civil society starting pushing for a more proactive council, rights to ARVs, safe blood transfusions, monitoring and better quality of data. The advocacy worked because in March 2005 treatment was rolled out in public health facilities, although it was off to a slow start primarily due to the prevailing stigma and denial.

The HIV and AIDS Strategic Plan is based on four priority areas: prevention; treatment, care and support; human and legal rights; and monitoring, research and surveillance, with youth targeted for special focus. The range of interventions regarding behaviour change include condom use, syndromic management of STIs and life skills programme in schools. Socio-developmental interventions included home-based community care for PLHIV and partnerships with NGOs and CBOs to improve service provision.

Some concerns include affordability and sustainability of community-based services in terms of allocation of funds and support for volunteer counsellors. Many donors are driving the agenda of identifying and documenting best practices without paying attention to the overall picture where duplication of efforts and wastage of resources requires more effective monitoring of development partner resources, communication and sharing practices within the country. AMREF has been a pioneer in addressing this challenge by conducting an assessment on best practices in three provinces – Mpumalanga, KwaZulu Natal and Eastern Cape – where large proportions of the population living below the poverty line.

TANZANIA: the country's first cases of AIDS were diagnosed in 1983 in Ndolage district and Bukoba regional hospitals, Kagera. Since then, the prevalence increased to 9% by 2000 and recently declined to 7% (2003). In 1992, between 20,000 and 30,000 people were dying every year due to AIDS. Currently, there are about 400,000 new infections each year and the country expects this to reach 1.6 million in 2010. About 130,000 children were orphaned in 1992, reaching 750,000 in 2000 and well over 1 million in 2003. Infections among pregnant women have risen from 8.9% in 1989 to 16.1% in 1993.

With a population of over 35 million in 2007 and a prevalence rate of 8.7%, one in ten Tanzanian children are orphaned; 2 million are living with HIV, of which 15% are youth aged 15 to 24 years.

The wide regional variations in the HIV prevalence have persisted since 1992. The prevalence among adults ranges from 7% in 1993 to 8.7% in 2003 and declined to 5.7% in 2007. Among women attending ANC the highest rates were reported in Kagera, Iringa, Mwanza and Rukwa provinces ranging from 12% to 21%. For the rest of the 22 provinces the HIV rate among ANC attendees ranged from 2.9% to 9%. Like other countries, HIV infections among women occur earlier (15-24 years) compared to men (25-34 years). In 2004, the regions worst hit by the epidemic were Kagera, Iringa and Mbeya with prevalence rates ranging from between 15% to 20%.

Whilst acknowledged as a national disaster two years after the first case was diagnosed, HIV/AIDS has spread rapidly across Tanzania, lowering life expectancy, weakening the health system and rendering it impossible to contain the epidemic and to care for all those already infected. The government responded by setting up an AIDS Task Force in 1985, which metamorphosed into the Technical Advisory Committee on AIDS in 1987 and later to the Tanzanian National AIDS Control Programme in 1988. The programme championed several behavioural and socio-economic interventions under five successive national health plans.

Initial behavioural interventions were evidence-driven, for example, the BCC component borrowed ideas from the Ugandan programme, "Straight Talk". AMREF's workplace education for truck drivers and truck stops project was among those initially funded under the USAID AIDSCAP initiative which included support to NGOs to complement government efforts in mitigating the impact of HIV and AIDS. Socio-developmental interventions focused on vulnerability of widows and orphans by providing support through the government to deal with collapsing social systems of traditional inheritance, marriage and fostering which were meant to protect the vulnerable in society.

Notable challenges to effective implementation of interventions are as follows. One, most interventions targeted economically-deprived areas, a context that made it difficult to implement vertical programmes without socio-economic components. Two, co-ordination of donor inputs was initially weak leading to duplication of effort. Three, initial interventions were driven by donors whose priorities did not always match national needs. For example, early prevention efforts focused on social marketing of condoms and treatment of STDs at the expense of behaviour change. Until recently, testing was limited due to poorly trained counsellors resulting in inappropriate and ineffective follow-up.

Four, sustainability has remained a challenge because of the highly mobile populations along the truck routes and at truck stops. Five, the country strategy opted to channel funds through NGOs which worsened efforts to sustain interventions as surveys conducted between 2001 and 2004 revealed that most community-based organisations were “cash and carry” conduits based in the urban areas and not the communities they purported to serve. Finally, research priorities were until 1998, at variance with the national priorities set by the AIDS Council. The country does not have a central agency for research where study findings should be deposited, meaning that key experiences and best practices have not always been available to those who need them for policy interventions, yet are often published in journals that are accessible to a few researchers.

UGANDA: The first cases of AIDS in Uganda were detected in 1982 in Rakai district within the Lake Victoria basin although the epidemic could have started spreading earlier. Limited epidemiological knowledge on AIDS, coupled with delayed response by the government and cultural misinterpretations of its cause compounded the spread of AIDS resulting in high morbidity and mortality evidenced in the late 1980s and 1990s. The civil war (1983-1986) that followed led to plunder of national resources that not only destroyed the economy, but also incapacitated the already decaying health infrastructure. There is a strong correlation between some of these political and socio-demographic trends and the likely impacts on prevalence of HIV in Uganda.

Uganda has a population of just over 27 million growing at a rate of 3.5% per annum and spread across 56 districts and 167 counties. With about 60% living below the poverty line, it is no wonder that over 60% of the population uses traditional and alternative medicine. In 1986, four years after the first cases were made public, the new government not only recognised and declared HIV and AIDS a developmental problem, but also committed itself through a multi-sectoral policy framework by setting up the Uganda AIDS Control Programme (Uganda AIDS Commission, 1998). However, ten years later, there was not much to show for the multibillion investments in HIV and AIDS prevention, care and support.

The prevalence had increased to 9% in 1987 with about 800,000 Ugandans living with HIV according to the national sero-prevalence survey. The epidemic peaked in 1992 with the situation looking very grim by 2001, when about 2.2 million were infected, 800,000 had died and well over 1.7 children orphaned due to AIDS. The devastating consequences of HIV and AIDS on the economy and health system performance were felt despite the presence of over 2000 agencies

implementing HIV and AIDS activities and the large budget. Analysis of regional variations in 2004 showed that Kampala, Central and North Central had the highest prevalence (> 9%) compared to West Nile with 2.5%. The urban areas recorded a high of 10.7% compared to 6.4% among rural adults.

Interventions span behavioural, socio-developmental as well as biomedical health services and research. The Joint Clinical Research Centre (JCRC) set up in 1991 has established an ultra modern facility for HIV and AIDS research. It has a wide network of partners, over 20 universities and institutions from USA, Europe and Asia, Makerere University Medical School, Mulago Hospital, Mbuya General Military Hospital, Uganda Virus Institute, Mbarara University Hospital, The AIDS Support Organisation, AIDS Information Centre, Uganda AIDS Commission and traditional medicine associations. Jointly, they have conducted over 30 clinical trials, led vaccine initiatives, championed HAART and nutrition-related research, and built the capacity of health workers in HIV and AIDS programmes. AMREF is not a member of this consortium although it is a major resource for the local community.

Between 2000 and 2004 the number of VCTs and PMTCT centres increased and this more than doubled the number of clients. Expansion plans included partnerships with the private sector and NGOs to increase coverage of BCC, STI management, stigma mitigation, workplace policies and mainstreaming rapid growth of participating NGOs, research institutions, media and CBOs. During this period there were mid-term reviews of the National HIV/AIDS strategic framework and incorporation of emerging areas for comprehensive HIV prevention and co-ordination meetings to review progress, challenges and opportunities. One unique feature in intervention choices has been the public debates and consensus building over controversial issues such as abstinence and condom use including marriage partners. TASO has emerged as one of the most successful organisations implementing interventions on BCC. Specifically, the TASO/CDC partnership has led to risk reduction activities such as reducing the number of partners, consistent use of condoms and abstinence.

Some of the key challenges include effective involvement of PLHIV and civil society as partners despite existence of a co-ordinating framework under the Public Private Partnership (PPP); sustaining empowerment of women for decision-making and improved livelihoods, human rights approach and working with highly mobile populations.

1.4 Study objectives

AMREF has been implementing HIV and AIDS programmes in five of the countries where it operates. However, the evidence generated and lessons learnt from these interventions have not been fully and scientifically assembled, analysed, synthesised and documented in a holistic and

integrated manner. Consequently, the stock of knowledge accruing from these interventions has not been packaged appropriately and shared with practitioners in HIV and AIDS, academicians, development partners and the rest of the world. This research, therefore, serves to fill this gap.

The overall purpose of this desk review is to systematically compile and integrate evidence on effectiveness of AMREF's HIV and AIDS interventions, best practices and lessons learnt and appropriately package and disseminate the information.

The final output will be a comprehensive and integrated book packaged for use by programme and research managers, development partners, and other stakeholders implementing or planning to implement HIV and AIDS programmes in poorly resourced settings in Africa. This paper forms the background material for the publication.

The desk review specifically:

1. Profiles the scope and evolution of AMREF's HIV and AIDS interventions by country
2. Appraises the extent to which AMREF's HIV and AIDS programming is in line with the corporate strategy and national health strategic plans for implementing countries
3. Assesses the extent to which HIV and AIDS project objectives have been met through the interventions
4. Explains how HIV and AIDS interventions have made a difference to individuals, beneficiary communities and institutions
5. Examines the extent to which HIV and AIDS interventions have informed the agenda for building the capacity of the community for leadership in managing interventions
6. Explains the implications of HIV and AIDS interventions for AMREF's community partnering approach for health systems strengthening and management
7. Evaluates the extent to which AMREF's HIV and AIDS interventions have influenced public health policies and practices.

2.0 STUDY APPROACH

2.1 Conceptual framework

This paper seeks to document the effectiveness of AMREF's interventions and understand best practices and gaps against the background of AMREF's corporate strategy, known body of knowledge and country-level HIV and AIDS policies and strategic plans including appropriate Millennium Development Goals. To address these issues, the following conceptual approach indicates that a multi-sectoral and multi-level

comprehensive evaluation framework is appropriate for understanding the nature and effects of AMREF's HIV and AIDS interventions. Figure 1 illustrates this schematic view of the framework where inputs are linked to intervention strategies yielding outcome measures at various phases (immediate, intermediate and long-term).

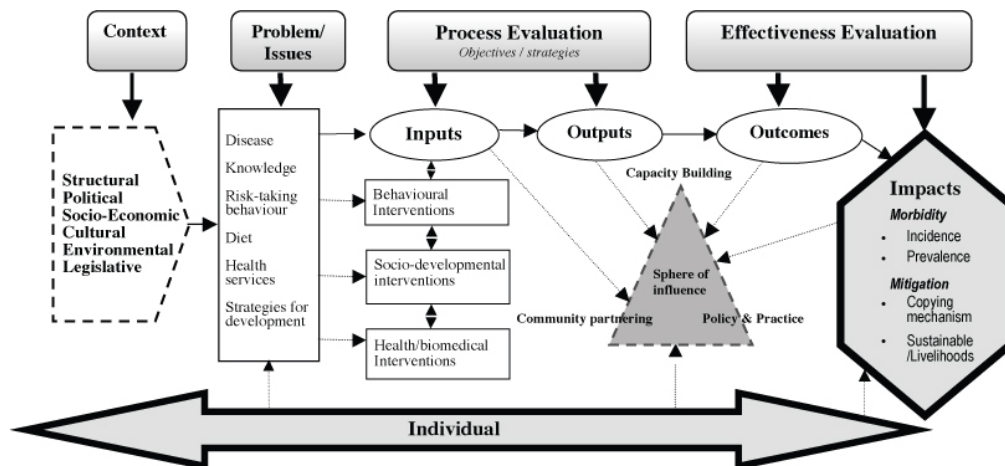


Fig 1: Comprehensive multi-level evaluation framework for HIV and AIDS interventions

2.2 Study design

This evaluative study design triangulates three frameworks: systematic appraisal of relevant HIV and AIDS literature, logical framework approach to describe AMREF's HIV and AIDS interventions and a comparative framework to integrate the existing body of knowledge with AMREF's experiences within and across countries. The methodology is suitable for this type of research because it allows for review of published and unpublished primary research; abducting evidence using explicit criteria that is replicable on the basis of the logical framework ensures that data from individual projects are pooled by intervention type and compared within and across countries irrespective of the project objectives, setting and target population, as well as outcome measures.

AMREF provided the basic database with project information in April 2009 for the period ending 2004. All five country offices were contacted in April 2009 to provide updated project information. Two countries, Uganda and Ethiopia responded at the end of May 2009, while two others, Kenya and Tanzania requested for clarification. The project administrator's resignation from AMREF occasioned further delays. Two reminders were sent, one in June and the other mid-July. Considerable efforts were made through follow-up emails and telephone calls in June and July 2009 to get updates from Tanzania and Kenya. The results of this study are based on the data from 73 projects as summarised in Figure 2 representing all AMREF's HIV and AIDS interventions.

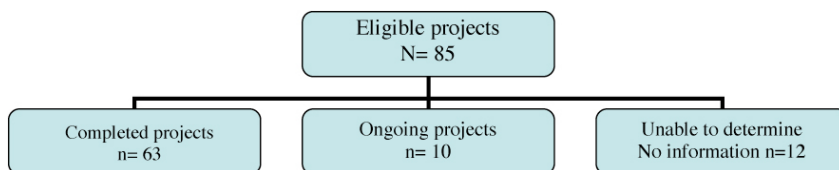


Fig 2: AMREF HIV and AIDS projects

2.3 Procedures for conducting the review

The sample frame for this study consisted of all HIV and AIDS projects implemented by AMREF. The following steps were followed:

1. Review of AMREF's projects and development of explicit criteria for appraising and synthesising findings from previous studies relevant to the study objectives
2. Defining the scope of the search of the literature, search engines and sources for unpublished data and determine criteria for classifying HIV and AIDS interventions and best practices
3. Conducting a comprehensive search for studies applying the criteria for inclusion by intervention types
4. Synthesising the reviews from selected studies based on the analysis plan.

The study adopted a logical framework approach to illustrate the application of the explicit criteria for appraising AMREF projects. Logical framework tables were completed for each set of intervention type (behavioural, social, health service) and by country and included:

- Project title
- Project duration (proposed vs. actual implementation period)
- Geographical coverage/ setting
- Target populations
- Project purpose, objectives and strategies
- Indicators for process and effectiveness evaluation
- Types of interventions – behavioural, developmental and biomedical/clinical services
- Sources of data, information and means of verification – published and unpublished
- Project effects on community partnering, capacity building, policy and practice
- Partnering with stakeholders including the community
- Source and levels of funding (proposed vs. actual funding)
- Best practices.

HIV and AIDS interventions are dynamic and require multi-level and multi-sectoral approaches. It is also important to note that each of these interventions can occur at individual, community and institutional

levels. A comprehensive approach to addressing HIV and AIDS problems is to intervene in all three broad areas and at all levels. Table 1 gives the breakdown of the components of the modified framework (UNAIDS, 2007; Sweat, 2008).

Table 1: Template for classifying types of HIV and AIDS interventions

INTERVENTIONS		
Behavioural	Socio-developmental	Health/biomedical
Interventions aim to influence individuals to know about HIV and AIDS, recognise personal responsibility, acquire skills to change behaviour and act (safe behaviour).	Interventions aim to influence social, economic, cultural and environmental conditions to change power, gender relationships and enhance positive change of behaviour and use of biomedical services	Interventions aim to influence safety and quality of biomedical products through administrative, legal and managerial decisions and provide guidelines on service provision for reducing HIV and other STI infections
Abstinence	Formal education programmes policies in schools, community	PMTCT services and guidelines
Fidelity Multiple partners – number of non-regular partners, commercial sex, high risk partners	Capacity building for socio-economic empowerment of women, PLWHAs, Income generating activities – micro financing	Provision of VCT and follow-up counselling for biomedical services referrals including HAART, social support, palliative care; involving PLWHAs in care Registers or directories available to PLWHAs
Condom use: consistently used	Gender-based violence programmes to reduce physical and sexual abuse	PEP: services and policies
Mass media: knowledge of HIV prevention methods; no incorrect beliefs about transmission	Social marketing of condoms: retail outlets and services distributing or stocking condoms	Management of STIs: services and policies, treatment of OIs Condom distribution in public settings
Counselling: voluntary HIV tests	Infrastructural development for physical access: number of health facilities, VCT, laboratories, HBC	Male circumcision Laboratory-based diagnostic testing
Peer education: schools, sex workers, workplace, etc	Infrastructure development: communication, telephone technology, transport	HAART: services such as drugs ARVs, guidelines and policies TB control programmes

Table 1: Template for classifying types of HIV and AIDS interventions

Undergo male circumcision; receive treatment for STIs; receive PEP	Social capital - support groups: number, involvement of churches, IGAs, education; volunteers, nutrition (palliative, emotional, spiritual, economic)	Microbicides to manage HIV and other STIs
Median age at first intercourse	Home-based care: No. of programmes, households and volunteers, range of care, care of orphans	Vaccine development
Use of contaminated needles	National HIV and AIDS policies and legal reforms to protect rights of vulnerable PLWHIV, access to safe needle syringes	Safety measures: screening blood products for HIV, use of gloves & protective clothing, needle exchange programmes
Support – individual is caring for infected member of the household	Nutrition and food security programmes	Trained service providers: competency skills, attitudes, PLWHA guidelines on counselling, diagnosis, PEP

To assess if a project has influenced policy and practice, the following characteristics are relevant: knowledge management which includes number of peer-reviewed publications, citations, conference presentations, website postings and media briefs; evidence of further research on the project, number of masters and doctoral trainings and staff development; information dissemination for policy making at the executive or political level; evidence of influence on project implementation practices by AMREF, the Ministry of Health and community; and whether output had been applied to develop a curriculum, training policy or clinical guidelines or applied in administrative and clinical practices related to the health system.

2.4 Databases and tools for documentation

The systematic search of published and unpublished documents categorised by the types of interventions proceeded as follows:

- Electronic databases included the register of the Cochrane Collaborative Review Group on HIV infection and AIDS, AIDSLINE, EMBASE, MEDLINE and Sociofile. For each of these databases, search strategies were developed consisting of both intervention and outcome terms
- A project database consisting of a directory of all studies was created through search and indexing of key project documents obtained

from AMREF's country offices and archives. A reference listing of all projects and relevant reports was carried out.

- A quick scan through all the documents to elicit key information to determine the explicit criteria for categorising the projects was undertaken. These were then read a second time to code the information using the criteria. Due to the laborious process, only projects with clear interventions were included. Two independent reviewers read these sets of documents but the variance was too wide. Given these discrepancies, and the lack of adequate detailed information, it was resolved to abandon the proposed meta-analysis. A modified template based on the logical framework was then applied to re-code relevant project information. The projects were then stratified according to the three main intervention characteristics as shown in Table 1.

2.5 Analysis plan

The pooled projects stratified by type of intervention were then analysed by comparing the interventions within and across countries as detailed below and in line with the six objectives outlined in this paper. The analysis plan was a four-step process: (1) describing and clustering the studies by type of intervention; (2) for each category of intervention, assessing how each of the six study objectives have been met; (3) for each objective, the analysis was phased starting from project to country and then regional level analysis; and (4) determining best practices by applying a 12-point criteria (see Annex I) regarding evidence, which was adopted from the Joint United Nations Programme on AIDS (UNAIDS, 2001).

2.6 Study limitations

Generally, the level of clarity and descriptive detail on project interventions was sketchy making it difficult to categorise the types of interventions into behavioural, social and policy. This also made it difficult to compare and evaluate effectiveness of interventions across projects in the five countries. Similarly, lack of common terminology and variations in cut-off points for a range of variables made it difficult to establish standards for comparing interventions over time. Not all key information specified in the explicit criteria was available for all projects and study period. To address these limitations, studies with near-complete information were selected and another researcher requested to re-code the information in order to control for any bias in applying the criteria for classification of the interventions. However, the outcome was near disaster as the coding was too varied to be of use in this study.

Secondly, and perhaps most challenging was the inconsistency in reporting and documenting outcomes and impacts of interventions across projects. Most of the initiatives reported outputs, which are the immediate results or deliverables. These inadequacies prohibited initial plans to conduct a

meta-analysis, which requires clear specification and measurement of outcome variables. For example, condom use could be a behavioural, social or policy intervention depending on specific activities or services provided to the target population, as well as the primary study objective.

Third, the focus on HIV and AIDS projects in itself posed a challenge in terms of how to address the vertical programming vis-a-vis integrated approaches. Some HIV and AIDS projects were stand-alone while many were comprehensive, yet others integrated non-HIV and AIDS health interventions. It is important that in future, a complete list of intervention characteristics is provided as part of the proposal and written reports to ensure standard use and application across AMREF programmes as well as facilitate comparison with established guidelines.

Finally, since the study did not set out to conduct an inventory of HIV and AIDS interventions implemented by other stakeholders in each of the countries, it is important to recognise that one can only infer AMREF's relative contribution to overall changes in health outcomes.

3.0 FINDINGS

3.1 Country profiling: scope and nature of HIV and AIDS interventions

Since 1987, AMREF has implemented several HIV and AIDS projects primarily in Ethiopia (6), Kenya (32), South Africa (5), Tanzania (30) and Uganda (12). About 70% of the projects have been implemented in Kenya and Tanzania. This section describes the chronology of AMREF's HIV and AIDS projects by type of intervention, geographical coverage, target population sub-groups, sources and levels of funding from 1984 to 2008.

Ethiopia

AMREF Ethiopia was officially registered in August 1998 but operations started as early as 1988. The organisation has implemented six HIV and AIDS projects, comprising one regional and five national projects. All the national projects are based in the sub-cities of Addis Ababa. The interventions which target adolescents, focus on behaviour change communication but also include components of socio-economic development such as IGAs and health service provision, namely, VCT, ARVs and care. Except for the regional project set up in 1989 and Phase I of the Fight against AIDS in Ethiopia (FATE) initiated in 2001, the rest of the projects were implemented 10 years after the first case of HIV was reported. Two projects targeted the youth, a third addressed

women's poverty and reproductive health problems using IGAs as an entry point, the fourth targeted factory workers at the workplace setting including CSWs and staff from transport companies and the last aimed at capacity building of home-based caregivers to sustainably care for those living positively with the virus. The youth projects addressed youth in- and out-of-school and those engaged in high-risk activities such as substance abuse and commercial sex work. Most of the initiatives ranged from one to five years, which is too short to assess capacity building for behaviour change in the community.

Funding for AMREF's HIV and AIDS interventions in Ethiopia has primarily come through AMREF Spain covering three projects at 35% of the cumulative budget, followed by AMREF Netherlands funding two projects at 14.4%. Other donors include Sida and NORAD who funded the regional project cover the rest of the budget. In addition to the external support, the Government of the Federal Republic of Ethiopia through the various ministries and sub-city administrators, managers of factories and non-governmental entities, special interest groups and CBOs are important partners contributing funds and in-kind support to ensure sustainability of HIV and AIDS interventions.

Kenya

AMREF Kenya was established and registered in 1986 although the organisation's operations in the country began way back in 1957. To date, Kenya has implemented over 30 HIV and AIDS projects dating back to 1989 and covering 20 districts stretching across seven provinces. Of these, 14 targeted behaviour change communication, 10 included socio-developmental activities, mainly capacity building and health systems strengthening, and 15 involved provision of biomedical health services. AMREF implemented 10 projects during the first decade (five years after the first HIV case in Kenya was diagnosed). The rest of the projects were initiated after 2000 within the second and into the third decade. About seven projects are urban-based, mainly in Kibera and Nakuru, while the rest are spread across diverse rural settings and health facilities in Kenya.

Funding for AMREF Kenya's projects comes from over 40 international donors and the following national offices – AMREF Netherlands, Spain, Italy, Netherlands, Belgium, Germany, and USA. In the past, most of the bilateral funding has come from Sida (three projects) but USAID is providing most funds directly and indirectly through FHI, CDC/KEMRI, PEPFAR, Futures and Jhpiego, among others. The rest of the partners include DFID, IREland, NORAD, Allan and Nesta Ferguson Charitable Trust, Arthur Ashe Foundation, AmFAR, GlaxoSmithKline, WHO, and a host of Kenyan professional bodies and businesses.

1985-1989

AMREF set up an AIDS committee in 1987 to co-ordinate and spearhead the AIDS initiatives at corporate level. The first project, which was regional and funded by Atkinson Foundation started in 1987 and focused on HIV and AIDS education and production of training materials. Taking advantage of its existing platform, the Health Learning Materials Department, AMREF produced some of the pioneering publications on HIV and AIDS in form of booklets and brochures under this project. By 1989, the characterisation of HIV and AIDS as a disease of those at 'high-risk' drove the organisation to launch its second major project, also regional, the workplace programme aimed at preventing HIV infections among truck drivers and sex workers around the small towns or 'truck stops' along the Trans-African Highway throughout Eastern and Southern Africa, but specifically from Mombasa to Busia and Malaba in Kenya. The project was later scaled up to train adolescent peer educators along the highway stops such as Mashauri, Sachangwan and Malaba mini towns working with major transport companies such as the SHELL/BP.

1990-1994

The early 1990s was a time of reflection and no new projects were initiated. Most of the seven initiated earlier were still ongoing in settings such as the workplace, slum areas and rural communities. Three projects focused on improving competencies of health providers at health facilities to diagnose and manage STIs and testing models for effective management of antiretroviral treatment in informal settlements. With AMREF's input, Comprehensive National Laboratory Policy Guidelines were drawn up in Tanzania (1991), Kenya and Uganda (1994) addressing the operation and development of the health laboratory services systems. The guidelines include recommendations for laboratory administrative structure; essential tests, techniques, equipment and equipment maintenance; essential facilities; staffing; the supply system; training and continuing education. However, the availability and quality of laboratory services remain a challenge. Specifically, the un-standardised choice of laboratory tests and techniques due to limited internal or external quality assurance leading to inaccurate and unreliable test results.

1995-1999

AMREF conducted the first national study on adolescent health and sexuality which led to new interventions in HIV prevention among the youth. The Kenya-Belgium STD Control Project set out to assess STD case management in Kisumu district, working through women groups and the community HIV prevention intervention in Busia and Mombasa districts. Between 1998 and 2002, AMREF implemented the syndromic

management component of the DFID-sponsored HIV/AIDS Prevention and Care (HAPAC) pilot project in Nyanza where the organisation successfully partnered with the Ministry of Health and other NGOs to build the capacity of staff as trainers. AMREF Kenya also pioneered community interventions to mitigate the impact of HIV and AIDS on household income, nutrition and food security and health in Makueni.

2000-2004

Over fifteen projects were initiated during this period. The collaborative project with the World Health Organisation on institutionalising quality assurance in laboratory services was initiated in Kenya, Uganda and Tanzania during this period. In Nyanza and Western provinces of Kenya, AMREF through the Maanisha programme started a capacity building programme aimed at strengthening CSOs through management, financial and technical support to plan, implement, monitor and evaluate HIV and AIDS interventions. In Kibera, the new knowledge indicated the need to shift towards a more comprehensive HIV and AIDS programme in conjunction with the Ministry of Health, providing holistic ART and care to PLWHAs. Over 600 PLWHAs are currently enrolled in the programme. Psychosocial support through group therapy, community outreach through door-to-door sensitisation and care and support provided by community health workers are key components of the programme. As the results of the regional project on scaling up best practices in HIV and AIDS were awaited, AMREF championed another socio-developmental intervention targeting the very vulnerable group, the uniformed forces. The project aimed at designing the first National Police Force HIV and AIDS policy that would then be scaled up to other areas.

2005-2009

Nearly all the seven projects whose implementation commenced in 2005/06 adopted the integrated approach to HIV prevention, care and support. However, it is unclear whether AMREF was eager to apply any new knowledge from the regional documentation project which had identified 16 best practices, because it is not stated in the proposal documents. Similarly, the Prison HIV/AIDS Project initiated in 2005 as a partnership between the Kenya Prison Service and AMREF, and funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) was neither comprehensive nor integrated. AMREF is currently implementing a TB and HIV and AIDS programme targeted at health facilities and pastoralists and nomadic communities in Rift Valley, and the northern part of Eastern province under the Maanisha Programme. AMREF also made a deliberate attempt to synthesise its long-term investment in select areas – Makueni, Machakos and Kibera – through a five-year integrated rural and urban PMTCT project and the “Africa Responds” project. The Busia Child Survival Project is an integrated initiative and aims to reduce infant and maternal mortality rates in two districts based on MDG indicators.

The unique East African Lake Victoria Partnership Programme, initiated in May 2007 is yet another regional intervention by AMREF to improve understanding of the incidence and prevalence of HIV among a vulnerable group – migrants and highly mobile populations, as well as establish a framework for effective co-ordination of interventions in such population sub-groups across member countries of the East African Community. The targeted mobile and vulnerable populations are students and staff at institutions of higher learning, migrant workers to agricultural plantations and the fishing community around the Lake Victoria basin. The programme also aims to document multi-sectoral processes of policy development and analysis.

South Africa

AMREF South Africa has probably implemented the least number of projects among AMREF's five countries since 1987. These cover six districts stretching across three of South Africa's poorest provinces, namely, KwaZulu Natal, Limpopo and Eastern Cape. All projects integrated behavioural and clinical components of treatment and care of PLHIV and care of widows and OVCs.

One project focused on socio-developmental aspects of improving quality of VCTs and health services. All the projects were implemented from 2000. Besides targeting the youth and OVCs, two projects brought to the fore issues of HIV and AIDS and traditional healers on the one hand and the quality of VCT and support services on the other. The main sponsors are PEPFAR through USAID and AMREF USA.

Tanzania

AMREF Tanzania was officially registered in 1986 and has implemented about 30 HIV and AIDS projects since 1987 covering 35 districts across most provinces in the country (mainland and Zanzibar). Most of the early interventions in the late 1980s to early 1990s were behavioural, focusing on promoting healthy behaviour and preventing infections. By the late 1990s into early 2004 AMREF shifted to integrated and comprehensive care approaches. Similarly, within the context of research, AMREF Tanzania has by far been the only international NGO championing such successful population-based clinical trials. HIV and AIDS programmes are at regional level and include interventions such as the Nomadic Youth Reproductive Health; at national level are implemented countrywide, either through direct AMREF engagement with the Ministry of Health and regional authorities, or through partners such as the Global Fund Project, Laboratory Strengthening Project, Angaza VCT; and local level interventions in a defined administrative area with the aim of developing models and advocating for scaling up. AMREF in Tanzania has championed ground-breaking

work in population-based clinical trials in HIV transmission. The projects implemented were well spaced out in blocks of six every five-year cycle. The geographical spread was initially highly localised to the lake region and Mwanza in particular, but the target populations include youth, women, working populations through workplace interventions and a range of high risk population sub-groups such as truck drivers, their assistants and clients and refugee populations. AMREF in Tanzania has partnered with over 20 major international funding agencies and institutions.

1985-1989

AMREF's pioneer interventions in Tanzania targeted behaviour change for STI prevention including HIV among high-risk populations such as truck drivers, their assistants and commercial sex workers at the truck stop towns, as well as staff in transport companies. These early interventions were restricted to Mwanza region and key urban settlements along the trans-Africa highway in Tanzania. Two of the pioneer projects in Tanzania were part of the regional (East African) initiative by AMREF to address promotion of healthy behaviour and prevention of HIV infections: the HIV and AIDS Education and Condom Promotion Project for truck drivers, their assistants and sex partners covered Kenya, Uganda and Tanzania; and the Adolescent Reproductive Health Project implemented in the core East African countries. Two other projects – the Geita mine project and an intervention study for preventing HIV infection through comprehensive management of sexually transmitted diseases targeted workplace and high-risk groups in Mwanza district. The main international sponsors included the EU, WHO, AIDSTECH, NORAD and Sida. AMREF partnered with the government, transport companies and other local investors, especially the mining companies, to implement these interventions. The first joint meeting between the government and NGOs implementing HIV and AIDS activities was held in 1988 in Mwanza.

1990-1994

Six more AMREF-led interventions were initiated targeting high-risk populations in the Lake Victoria region of Tanzania. For the first time, the workplace programme targeted other areas outside Mwanza region – companies and factories in Kigoma region as well as government ministries and departments. In 1993, AMREF in collaboration with several external partners started the often cited intervention Mema Kwa Vijana in four districts of Mwanza region. It was also the first in many aspects: targeting adolescents in rural Tanzania, first innovative community trial on sexual and reproductive health involving schools, and the first demonstration of partnership with religious groups. In 1994, AMREF launched yet another first – targeting refugees as an emerging vulnerable group. With funding from UNFPA and UNHCR, the AIDS prevention project targeted refugee camps in Mwanza. Other new funding partners during the 1990-1994 period included AMREF Germany, AMREF Netherlands, DfID-UK, DANIDA, Ford Foundation and Strategies for Hope, among others.

1995-1999

No new projects were implemented during this period, but AMREF intensified implementation of its now over ten projects. AMREF in Tanzania participated in the regional project aimed at consolidating evidence through best practices. Of the four projects picked to showcase best practices, two were AMREF's – the Geita Gold Mine project and the Angaza VCT project. The CCBRT's Legal Aid Services covering three districts in Dar es Salaam and the Service Health and Development for People Living with HIV and AIDS (SHDEPHA) both focused on legal support to cope and involvement of people living positively with HIV/AIDS.

2000-2004

Experiences from the consolidation phase and ongoing efforts to document best practices and maximise the impact of successful interventions, led AMREF in Tanzania to start another six initiatives between 2000 and 2004. This period, not only marked a turnaround for AMREF as a pioneer in quality research, but it also marked a major shift from stand-alone to fully integrated HIV and AIDS activities and a comprehensive approach to management of HIV as an STI, as well as scaling up projects to cover the rest of the country. For the first time, AMREF developed a regional quality assurance programme to improve the quality of laboratory and support services for diagnosing and managing HIV and AIDS clinical interventions. This success was linked to the pioneering work on the multi-country collaborative clinical trials on the role of herpes simplex type II in HIV transmission. Projects also incorporated the care and support components of the continuum of HIV and AIDS management and intensified efforts to scale up VCT. Another successful programme addressing stigma and providing VCT to youth – Angaza VCT Programme – was started in 2001. The AMREF Mine Health Project, established in 2001 in collaboration with Ministry of Health, London School of Hygiene and Tropical Medicine and the National Institute of Medical Research, aimed to mitigate the impact of HIV and AIDS on mine workers and the surrounding community in Geita Gold Mines, North Mara Mine (Barrick) with outreach services to other mines. Other initiatives included Same Day HIV Counselling and Testing, Adolescent Health in Schools, and national projects such as renovation of health facilities and provision of supplies and commodities.

2005-2009

During this period, clinical trials and research-based projects were even more visible following the successful trials on the role of herpes simplex on HIV transmission: a new clinical trial on microbicides, strengthening laboratory capacity in Tanzania supported by CDC,

and innovative ways of counselling sero-discordant couples. Similarly, based on experiences from Angaza VCT and other initiatives to scale up VCT, AMREF in Tanzania was funded and also selected for grant making under the Global Fund Rounds 3 and 4. More socio-developmental initiatives targeting the youth included the Ujana Project, which focused on providing life skills for out-of-school youth in Iringa, Dodoma, Pwani and Zanzibar; and the Jijenge Project aimed at improving women's sexual and reproductive health around the Lake Victoria Zone. These initiatives were funded through AMREF's national offices in Spain, Netherlands and Canada; USAID, FHI, CDC, WHO, UNFPA, Wellcome Trust, the Medical Research Council in UK and DfID, among many research partners including KEMRI, various universities and local authorities. In 2008, AMREF won another USAID grant for a testing and counselling programme known as Angaza Zaidi.

Uganda

AMREF Uganda has implemented 12 HIV and AIDS projects since 1987 covering six districts: Kabale, Masaka, Luwero, Soroti, Makerere and Nakasongola. In the early 1980s most projects focused on behavioural interventions and targeted the youth. In the 1990s the concerns over the devastating consequences of AIDS on livelihoods and communities led AMREF Uganda to consider socio-developmental interventions focusing on OVCs and widows. In the latter part of the 1990s it was clear that access to quality services was an integral part of mitigating the impacts of HIV and AIDS on individuals and society. Most projects aimed at strengthening the infrastructure and quality of laboratory services and incorporated health systems strengthening as a core area of intervention for building a sustainable community-based system.

1984-1989

Despite evidence of an early epidemic, AMREF Uganda did not respond immediately to HIV and AIDS challenges until 1989 when the first AMREF regional project on adolescent reproductive health was implemented. Previously, before registration and official launch in 1983 and 1987 respectively, AMREF was involved in outreach and humanitarian services during the civil war (1984-1986).

1990-1994

Three projects focusing on rural youth in school at primary and secondary school level and OVCs were implemented during this period. The school projects were in Kabale and Soroti districts while the OVC project covered Kabale and Masaka districts. All three initiatives addressed behaviour change at individual and institutional levels, as well as socio-developmental interventions targeting OVCs, widows and guardians.

1995-1999

This was a period of reflection for AMREF on HIV and AIDS interventions. AMREF Uganda implemented two projects during this period. The second was a three-year project targeting commercial sex workers in urban informal settlements. This was a behavioural as well as socio-developmental intervention aimed at promoting alternative work for CSWs in these settlements. Antiretroviral therapy (ARVs) was first available in Uganda in 1996, four years after the 1992 clinical trial conducted by the Joint Clinic Research Centre (JCRC).

2000-2004

AMREF Uganda participated in two regional initiatives and one socio-developmental intervention targeting OVCs, widows, and guardians in Butuntumula sub-county of Luwero district. The best practices regional initiative aimed at augmenting previous experiences and maximising the impact of successful HIV and AIDS prevention, care and support in eastern and southern Africa. Among the successful projects showcased was the Kitovu Mobile AIDS Home Care Programme in Masaka district. The second regional collaborative project aimed at strengthening the infrastructure for laboratory services and improving the quality of laboratory services for HIV and TB diagnosis. The project was a major collaboration with CDC, NTRL, AMREF laboratory and Ministries of Health in Kenya, Uganda and Tanzania.

2005-2009

All three projects, with the same implementation dates (2005-2008) focused on socio-developmental interventions in rural and urban districts of Uganda. The first project was designed to build a sustainable community-based system for mitigating health and socio-economic effects of HIV and AIDS on OVCs in Kikyusa sub-county of Luwero district. The second, Kawempe Community Health and Development project where the church, through five parishes in Makerere, Kampala district is offering life-transforming options to turn around the lives of CSWs and communities. The third intervention addressed behaviour change and skills development for in- and out-of-school youth in three sub-counties of Nakasongola district.

Regional HIV/AIDS interventions

Regional projects began as early as 1989 with the Adolescent Reproductive Health Programme in Kenya, Ethiopia, Uganda and Tanzania. This was followed by the HIV/AIDS and STI education project among truck drivers, their assistants and sexual partners and community around the major truck stop towns along the northern corridor trans-African highway. The Regional Laboratory Programme at AMREF was established in 1985 to assist the Ministries of Health

in Kenya, Uganda and Tanzania with developing effective and sustainable laboratory services. The programme has focused on quality improvements of clinical and laboratory diagnostic services at patient and community level, working closely with the Ministries of Health, faith-based organisations, and health-related NGOs. Since 1993, AMREF operated a limited External Quality Assessment Scheme (EQAS) for district and primary health care laboratories. In 2000, AMREF in collaboration with the WHO Headquarters established a pilot project to develop and implement a laboratory quality assurance programme in Kenya, Tanzania and Uganda, with the overall goal of improving the quality of essential diagnostic services in clinical laboratories. In the project it was proposed to involve the national and local administrations in the co-ordination and implementation of the East African Regional External Quality Assessment Scheme (EA-REQAS) as a regional initiative, in order to share resources and experiences across the three countries. The EA-REQAS was introduced between January 2001 and April 2003 as part of strengthening National External Quality Assessment Scheme (NEQAS) as well as integration within the region.

Funding AMREF'S HIV and AIDS interventions

AMREF's funding partners for HIV and AIDS interventions comprise public and private sources including foundations, corporate organisations and individuals. Overall, funding for AMREF's interventions come from over 30 international development partners and over 40 national investors/entrepreneurs and individuals excluding those channelled through AMREF's national and country offices. It is important to note that as of 2008, USAID and its subsidiary agencies were the highest sponsors of HIV and AIDS interventions. Ironically, funding from PEPFAR for HIV prevention dropped by 6% while that for treatment increased by the same percentage between 2004 and 2006. A significant proportion of the money for prevention of HIV went to abstinence-only programming. With the change in leadership in the US, the long-term effect of this drop in funding on AMREF's interventions remains to be seen. However, AMREF's budget for HIV/AIDS/STIs and TB dropped during the financial year 2007/08.

To ensure quality programming and implementation of activities, AMREF partners with international organisations such as the World Health Organisation (WHO), UNICEF, UNDP, UNAIDS and Global Health Forum; regional bodies like SADEC, EAC, NEPAD as well as corporate agencies including Johnson and Johnson and Accenture, among others. AMREF maintains close working relationships with Ministries of Health, civil society, CBOs and other NGOs in all countries of operation.

An attempt was made to get an indication of the direct and indirect sources of funds for HIV and AIDS interventions between 1988 and 2008. However, it was difficult to break this down by country and project because the information was not included in all project documents. AMREF's funding

for HIV/AIDS/STI/TB increased after 2000 and in the last three years, these interventions have accounted for about 36% of AMREF's total budget for programming.

The following are examples of funding by select donor partners. The partnership between AMREF and the Swedish International Development Agency (Sida) has covered activities in East Africa with donations from the Swedish Broadcasting Corporation going towards HIV projects in Luwero and Kechene while Kaupthing Bank funded the Butuntumula water project.

AMREF Canada has supported HIV and AIDS activities through funding by the Canadian Society for International Health (counselling of HIV discordant couples), Stephen Lewis Foundation (OVCs in Luwero district) and more recently, John Nixon Memorial Fund (refresher courses in essential laboratory services at AMREF Headquarters). Since 2003, AMREF in USA and the Clinical and Laboratory Programme, in partnership with Global AIDS Programme/Centres for Disease Control, among others, received a significant grant from PEPFAR to implement a comprehensive HIV prevention and ART treatment programme in Kibera, currently supporting four health facilities on laboratory strengthening.

AstraZeneca has, through AMREF in United Kingdom, supported the development of an integrated model to tackle HIV and AIDS, malaria and TB in Uganda. Recently, AMREF in UK helped to fundraise for projects on maternal and child health in Kenya and Ethiopia and the rights of people living with HIV and AIDS in Tanzania. They also raised substantial funds under the emergency appeal for those affected by post-election violence in Kenya in December 2007- March 2008.

3.2 Effectiveness of HIV and AIDS interventions

Extent to which objectives were met

It is a fact that projects rarely achieve 100% of their planned targets. Largely, information on whether a project's objectives were met comes from project evaluation reports. However, comparing effectiveness across projects and countries is difficult due to variations in timing of baseline and evaluation surveys, level of detail in project reporting and in the measurement of variables. Even simple errors like reporting percentages without indicating the actual targets or the sample size exposes any comparison across projects to subjectivity. This section summarises the extent to which project objectives were met by country and types of intervention.

In **Ethiopia**, all the six projects which ended in 2008 had behavioural, health service and socio-developmental interventions. Only four projects had conducted baseline surveys and end-of-project evaluations, providing a basis for comparing the effectiveness of the interventions. The targets set were realistic and in some cases too basic. The project on community-based health care was effective in implementing its planned activities based on training, but the issues of quality and effectiveness on individuals and community could not be adequately assessed 12 months after the intervention. This may in part explain why the project did not come up with conclusive evidence on freestanding palliative care and centres from this evaluation.

In **Kenya**, 25 projects were included and 20 had behavioural objectives and interventions, 13 had in built some socio-developmental interventions and 15 included components of health service provision. About 10 projects addressed special population sub-groups: CSWs, truck drivers, nomadic communities, slum dwellers, PLWHAs, widows, OVCs and refugees. There were five workplace programmes covering the police, transport companies, CSWs, health workers and teachers. The youth programmes are mainly integrated with reproductive health initiative for both in- and out-of-school youth. Scale up of interventions has mainly been in VCT and PMTCT with more recent undertaking to build capacity of CSOs under the Maanisha Programme. The objectives of most studies were met but mainly at output level with very few measures covering effectiveness of interventions in the intermediate and long-term periods. Another important initiative in Kenya is the policy development project for the police force which was initially implemented in Nakuru and later scaled up to 23 districts after developing an HIV and AIDS policy framework.

In **Tanzania** the initiatives covered a broad range of interventions and target groups. Twenty of the 25 projects assessed had behaviour-related interventions, 14 were socio-developmental and 16 included health service interventions. The interventions are also unique because it is the only country office involved in clinical trials. Most of the projects focused on special population sub-groups and efforts have been made to scale up successful interventions from the truck drivers' behaviour change project, the youth programmes and workplace interventions.

Of the ten projects in **Uganda**, eight have a behavioural component, six socio-developmental and seven health service interventions. This means that most projects tend to be integrated. The profiling shows that the interventions were evenly spread between the youth, CSWs and programmes for OVCs and widows. The success of Uganda's interventions lies in the community level effects supported by institutional policies and social support, essential for rebuilding populations ravaged by the impact

of the epidemic. Measures of effectiveness are again limited to project outputs with only two studies demonstrating any intermediate effects. For example, reports from the Luwero project aimed at building sustainable community-based systems for OVCs and the marginalised poor indicate that beneficiaries develop sufficient and sustainable livelihoods and HIV transmission in the project area has reduced. However, the methodology used for assessing these outcomes is simple surveys. The Kawempe project targeting CSWs showed promise in assessing intermediate outcomes, but it remains to be seen if these interventions will have a long-term impact.

Three AMREF projects in **South Africa** were included in this analysis: the youth project in Mtubatuba, OVC programme in Limpopo and KwaZulu Natal and VCT project in Eastern Cape. The purpose and objectives were met at the immediate level but the impact of the training and advocacy remains to be seen. Changes in policy and practices and how improved access to rights by OVCs has changed livelihoods are not clearly indicated. Similarly, measures of quality and efficiency of integrated services under the project on integration of VCT and TB facilities were not clearly stated.

Effects on individual behaviour

The only community-based trial – Mema kwa Vijana Project – which measured the impact of biological and behavioural outcomes for a cohort of 9,645 adolescents in 1993-2001, remains the gold standard for measuring these outcomes. The conclusions drawn were that there had been significant improvements in sexual and reproductive health knowledge, attitudes and self-reported behaviour. However, these significant improvements did not consistently impact on the biological outcomes in either direction which include HIV incidence within the three years of the trial and prevalence of other STIs and pregnancies. The question that this scenario begs is why then does AMREF continue to implement similar programmes without using the lessons from such seminal work and thereby adding value to subsequent products?

Of the total number of projects included in this assessment, 56 had a behavioural component. All projects achieved 80% of their immediate project results. Over 70% increased awareness and knowledge on sexual and reproductive health, while about 20% changed attitudes towards safer sex practices. However, while the self-reported measures of proportions who practised abstinence, reduced the number of partners and consistently and correctly used condoms show relatively high numbers, the assessment of prevalence and incidence of HIV do not seem to change. The intermediate and long-term outcomes are the observed changes in behaviour as a result of responsible actions taken by the individual.

One difficulty of making any direct comparisons is that AMREF projects continue to use different cut-off points for ages of youth interventions. For example, the age-ranges for the projects assessed in these studies were: in Ethiopia, 5-24 years (Akaki-Kality) and 8-24 years (FATE); in Kenya, 10-24 years (Thika); in Uganda, the range was from 6-14 years (Kabale), 8-24 years (Soroti) and 10-30 years (Nakasongola); and in Tanzania, 12-19 years (Mema kwa Vijana), 15-14 years (VCT project), to 10-24 (Ujana) in Tanzania. While the different target groups reflect the objective of the initiatives, it makes it difficult to compare outcomes across projects. Technically, one needs to know how the behaviour was measured and whether the sample size was sufficiently large so as to detect the suggested change in behaviour. The sample sizes varied from as low as 20 CSWs in Ethiopia, for example, to over 300 across projects in Uganda.

In general, the immediate outcomes (outputs) for all projects were reported with varying levels of success. However, very few indicated measures of sustained change in behaviour. In Ethiopia, the Youth and HIV Project reported a reduction in risk of unsafe sexual practices among CSWs and their clients without giving any figures. Similarly the project noted a reduction in exposure to addictive substances without any quantification.

Effects on beneficiary communities

Population health level improvements are not easy to demonstrate or attribute to a single cross-sectional research project, although trial participation can lead to health improvements for a specified population. As described above, the only initiative which has shown an improvement in population health was the Mema Kwa Vijana Project which measured behavioural effects on the community using a cohort of 9,645 adolescents with a mean age of 15 years. The impact of the integrated approach under which curricula and youth-friendly reproductive health services were established did not realise the full potential to influence change in community values and norms regarding adolescent sexuality because advocacy for policy change was weak. The projects in Uganda show great potential for measuring improved health outcomes at community level, but the evaluations have not been conducted.

Ethiopia, which had six HIV and AIDS projects had mixed results: the regional project was effective in creating awareness and developing materials on AIDS through TALC. However, like most projects, the activities ended with the project since sustainability was not built into the activities. The other projects are located in one setting – sub-cities in Addis Ababa – and tackle issues across the continuum of care namely prevention, care, treatment and mitigation of the impact of the epidemic. The main challenge was that the project duration was too short for effective behaviour change. They lasted between one and three years.

The relationship between the set of interventions and the target community is mediated by all kinds of factors. But more significantly, the appeal of a project may vary among members of the same community. Thus, it is hard to speak of a direct effect of an intervention on the beneficiary community. Similarly, it should be noted that changes in individual behaviour should lead to effects on the beneficiary community in the long run.

Effects at institutional and societal level

Institutional or societal level interventions include organisational aspects of the institution and its functioning, policies and technical guidelines and research. Intervention or project effects on organisational structures of institutions were mentioned in several reports and results published such as schools, health facilities and factories, including other workplaces. Clear examples of these effects are demonstrated by all projects on workplace interventions in Tanzania, Kenya, Uganda, Ethiopia and South Africa where HIV and AIDS policies were designed and enacted. In Kenya, the development of the HIV and AIDS policy for the police force was successful and interventions were scaled up to over 20 districts.

Several projects also reported setting up youth clubs or management committees to oversee community level interventions. For institutional effects to take root, the composition and agenda of these clubs and committees could be monitored through minutes of meetings, for example.

Several projects addressing improvements in the infrastructure and quality of health services for youth, laboratory and PMTCT indicated that new guidelines or standard operating procedures were developed for service provision. Quality laboratory services are the cornerstone of a successful counselling and testing programme both at individual and community level. Since 1993, AMREF has been operating an External Quality Assessment Scheme (EQAS) for primary health care laboratories in order to improve the quality of test performance. In 2001, AMREF collaborated with the World Health Organisation (WHO) to establish a project which would pre-test a laboratory quality assurance programme in selected districts in the three main East African countries. The process was participatory, engaging both the national and district level staff in planning and implementation of the scheme and to avoid duplication of resources and effort.

A number of projects described how the research had contributed towards product development. In Kenya, Uganda and Tanzania, AMREF interventions in community partnering and networking

mechanisms have helped inform the Ministries of Health in developing the community-based strategy now enacted in all countries under study. AMREF's aggressive approach in partnering with the government, research institutions and other NGOs has helped close the gap between programming, policy and practice.

3.3 Effects on capacity building for leadership in managing HIV and AIDS interventions

Two sets of evidence attest to the extent to which interventions have strengthened leadership capacity for managing HIV and AIDS activities. One, the impact of Continuing Professional Development (CPD) and Technical Services Facility (TSF) conducted at the AMREF International Training Centre.

AMREF has an International Training Centre which provides basic and post-basic training in many areas of public health including HIV/AIDS, STIs and TB. Short-term training is offered to public and private sector health workers, specifically individuals and groups from community-based organisations, civil society and faith-based organisations. More recently, the training has focused on training employees and employers at the workplace. The courses cover information, education and communication for behaviour change communication, counselling for VCT uptake, caring for HIV positive employees and skills for developing and implementing workplace HIV and AIDS policies.

The Directorate of Capacity Building hosts e-learning programmes for nurses' upgrading under the Virtual Nursing School and also runs a one-year Diploma in Community Health course. The directorate, not only helps to build the capacity of health workers to identify and improve weaknesses in their work environment, but also the health system. The training programmes are unique because the participants are usually drawn from a pool of health workers in countries and communities where AMREF operates.

AMREF, by virtue of its strategic position, is often called upon to discuss, advise and debate on a wide range of issues on HIV and AIDS. The audience varies from politicians and policy makers to implementers and other civil society organisations. The organisation uses such opportunities to forge partnerships and strategic alliances between private and public agencies, teaching and research institutions. Examples of partnerships are with Strathmore University (Advanced Health Care Course) and Moi University (Masters in Public Health), Makerere University (training in leadership and research), Muhimbili University of Health and Allied Sciences and Iringa University College (training and research), UCLA, KEMRI/CDC (research), Johnson and Johnson (partner in community-based training on HIV and AIDS) among other research institutions and business organisations.

Nearly all projects in AMREF, irrespective of the intervention, have a capacity building element. These range from life skills for behaviour change and taking responsibility for individual choices at school- and family-level, as well as workplaces and health facilities. The organisation's capacity building activities also include development of curricula and training manuals, and establishing support systems to ensure implementation of the changes. This includes training through workshops on how to use the new protocols or guidelines and orientation sessions for employers and teachers to ensure institutional support and leadership in implementing the activities.

Lastly, AMREF hosts two regional programmes, the Technical Support Facility (TSF) and an ART Knowledge Hub at the headquarters. TSF is a UNAIDS-funded initiative which aims to improve access to quality consulting services for scaling up HIV and AIDS responses at national and regional levels across Eastern Africa. Its services are provided through a pool of independent national, regional and international consultants. The ART Knowledge Hub is another innovative approach expected to build the capacity of health workers through access to the latest ART information.

In collaboration with the Ministry of Health in Kenya, Uganda and Tanzania, AMREF chaired the Joint Review Mission of the Health Sector, which produced a position paper and also continues to chair the International HIV and AIDS NGO Forum, which collectively enhance and support capacity to roll out new policies or harmonise differing SOPs and manuals for community health workers. AMREF has several examples of programmes implementing grant-making projects for the non-public sector. The Maanisha Programme is a special case where AMREF is building the capacity of CSOs and CBOs to participate effectively in provision of services to the community through the grant-making mechanism. Other excellent examples are in Tanzania (Global Fund for Malaria, HIV/AIDS and TB). In Uganda, both at institutional and community levels, AMREF is piloting a unique model of promoting an integrated approach to the management of malaria, TB and HIV and AIDS; strategic leadership for human resource development; support for disease outbreaks; monitoring and provision of quality laboratory services.

3.4 Effects on community partnering approach for health systems strengthening and management

To assess the implications of HIV and AIDS interventions in the community partnering process, over 40 projects have demonstrated the importance of linking communities to formal health systems through infrastructure development, supply of commodities and putting in place mechanisms for improving the referral process.

Examples of successful experiences include the regional project on improving infrastructure and quality of services offered by laboratories in East Africa. The process was participatory and staff in laboratories at community level were trained and given commodities to offer better services. Most of the programmes involving young people were participatory, but in the end, high mobility among this target group had a negative effect on project sustainability.

PMTCT programmes in Kenya, Uganda, Tanzania and South Africa have demonstrated how participatory mechanisms operationalise the concept of the devolution of health systems where community structures are jointly set up to facilitate linkages between communities and health facilities. These experiences from the Nyando and Zingatia projects in Kenya and the Kawempe urban commercial sex workers project in Kampala have helped to improve attitudes of service providers towards their clients and that of clients towards their providers. The Kawempe project has also helped to reduce the social stigma associated with CSWs by empowering young, vulnerable women, and a similar one empowering young people in Kabale.

In South Africa, local communities, community-based and civil society organisations have fully integrated HIV and AIDS activities into their day-to-day activities and ongoing community-based health care programmes. In Uganda, AMREF has participated in developing manuals for community health workers and also contributed to the global WHO debate in Geneva on community health workers and their relevance to health development.

In assessing whether these projects effectively influenced the participation of communities, one needs to systematically examine the evidence in light of the principles of community partnering. Some of the processes, such as ownership and participatory decision-making, are difficult to demonstrate but with good documentation and effective monitoring the evidence can be quantified.

3.5 Effects of interventions on policies and practices

Interestingly, despite the challenges of good documentation, AMREF's interventions have influenced policy and practices in a number of ways. AMREF's interventions have generated over 500 publications of which 29 are journal articles published in 12 journals, mainly from Tanzania because of the clinical and community trials, Kenya and Uganda. There are about 50 abstracts presented at various conferences, 10 books and case studies, over 40 workplace policies and school or training manuals credited to AMREF's interventions, over 250 project reports including surveys, 20 case studies and best practices, well over 200 unpublished reports and pamphlets, and several CDs and videos, and website information.

AMREF has on many occasions started a series of publications ranging from the Afya publication, "Zero-grazing" AIDS booklets for youth, teachers and workers and Strategies of Hope, among others.

AMREF's Maanisha Programme builds capacities of over 400 CSOs and provides small grants to nearly 200 HIV/AIDS CSOs and networks in Nyanza and Western Provinces. The programme is in the process of documenting and developing manuals for the grant making and capacity building processes.

AMREF is strategically positioned to influence policy and practice in HIV and AIDS in Africa. The organisation has been privileged to have two previous chairpersons of the National AIDS Control Council as members of the AMREF Kenya Advisory Council and Chair of the AMREF Board. Similarly, country directors and their deputies are members of numerous taskforces in the Ministries of Health – for example, those developing guidelines on use of ARVs and the Joint Intersectoral Co-ordinating Committee for Global Fund in Kenya and Tanzania, just to name a few. In Kenya, AMREF was appointed to the co-ordinating body for VCT in Homa Bay in partnership with the Ministry of Health, MSF Belgium, Care and WOFAK because of the strong community counselling experiences. The project on the police force which was initially piloted in Nakuru, has been scaled up to several districts in Kenya.

AMREF Kenya helped to establish HENNET, a consortium of health NGOs, which advocates for policy change. AMREF is also represented on the HENNET Board. The organisation collaborates with KEMRI/CDC in laboratory quality assurance and testing for HIV and led the effort to improve the infrastructure and quality of laboratory services in Kenya, Uganda and Tanzania where external equality validation tools were developed and operationalised.

The seminal work of Mema kwa Vijana community project and CSWs in Uganda are but just a few that have been presented at most HIV and AIDS forums and driven the agenda for programming in Africa. Participation in international meetings is another way that AMREF has attempted to influence policy and practice. The organisation signed an understanding with the ICASA conference organisers to play a major role in advocating for policy change. Staff in all countries participated in national workshops on "Integration of HIV/AIDS into National Development Planning" because of experiences with workplace policy development. At regional level the directors have attended regional AIDS meetings of health ministers in Kenya, Uganda and Tanzania.

The Global Fund, USAID and PEPFAR funding mechanisms are leveraging technical and financial resources for health development especially for malaria, TB and HIV and AIDS interventions. The proposed interventions will also complement the World Bank-funded Total War Against HIV/AIDS (TOWA) in Kenya implemented by the National AIDS Control Council (NACC).

In Uganda, AMREF has specifically contributed to policy development and mitigating its impacts through behaviour change programmes, training and building capacity of health providers at the community- and health facility-levels. The Foundation has participated in improving quality assurance for syndromic STI treatment programme and VCT, spearheading adolescent sexual reproductive and school interventions and championing unique models for care of AIDS orphans.

4.0 DISCUSSION

Sub-Saharan Africa is demographically, culturally, socially, geographically and politically diverse, and the response to HIV and AIDS has been equally diverse. AMREF's interventions through country offices in Ethiopia, Kenya, South Africa, Tanzania and Uganda mirror this diversity in approaches addressing HIV and AIDS challenges. While such heterogeneity makes it difficult to generalise experiences from one localised or national context to another, it is possible to find common threads that can help piece together these patches of local and small-scale experiences in the five countries. In this section, these findings have been discussed against AMREF's mission and strategy, as well as in line with the international and national goals on HIV and AIDS in sub-Saharan Africa.

In discussing the findings, the basic steps of an evaluation design have been followed, namely; formative, process and outcome (Coyle *et al*, 1991). In the formative evaluation the content, nature and scope of the intervention have been assessed to confirm whether or not they match the needs of the target client or community.

4.1 Is AMREF doing the right thing at the right time and place?

To answer this question, the coverage and target groups of past and ongoing interventions have been compared to AMREF's mission and strategy; government strategic plans and priorities; and global strategies such as the MDGs and other health and health-related declarations in Africa.

AMREF's mission is to "ensure that every African can enjoy the right to good health by helping to create vibrant networks of informed communities that

work with empowered health care providers in strong health systems." In achieving this mission, AMREF deliberately undertakes to work with disadvantaged communities.

In all the five countries, the organisation has initiated projects in geographically diverse areas, focusing on disadvantaged communities. In Ethiopia, the spread is less obvious since most projects are concentrated in poor urban sub-cities of Addis Ababa where the prevalence of HIV and AIDS is almost four times higher than the national average. In Kenya, the projects are spread across six provinces, namely Nyanza, Western, Coast, Eastern, Central and parts of the Rift Valley that are semi-arid and inhabited by pastoralists. These areas have the highest HIV prevalence rates and/or highest poverty rates.

In Tanzania, the projects were initially concentrated in Mwanza region around Lake Victoria basin, but have since been scaled up to cover over 26 districts in most regions of the mainland and Zanzibar. Again, most the regions selected are those with high HIV prevalence rates (Mbeya, Kagera, Iringa) or target sub-groups that are most vulnerable, such as the youth. In Uganda, AMREF projects were initially in the slum areas of Kampala, districts ravaged by the civil war such as Luwero and Kabale and vulnerable communities in the western and eastern parts of the country. AMREF's projects in South Africa, though few, are strategically selected to cover the most impoverished provinces of Kwazulu Natal, Mpumalanga and Free State which also have the highest prevalence rates in the country (over 27%) and highest percentage of TB incidence with HIV infection.

Coverage and target groups are in line with national government strategic plans as well as the international MDGs, Abuja and Maputo declarations by Ministers of Health on HIV and AIDS. All government HIV and AIDS strategic plans emphasize the need to focus on prevention, care and support and AMREF interventions have done this well based on the earlier analysis of the types of interventions. Nearly 80% have behaviour change component, about 60% include socio-developmental interventions and 65% include biomedical interventions or other health facility-based services. The strategic plans adopted the UNAIDS multi-sectoral frame which AMREF has incorporated in its programming by working with key partners – the Ministry of Health, CBOs and CSOs. Trends in HIV prevalence have reversed but countries are far from achieving the 2015 MDG of halting the spread of HIV because the actual number of deaths due to HIV and AIDS is increasing and incidence rates are still high.

All in all, AMREF's interventions are structured according to four priority areas of most country strategic plans: prevention; treatment, care and

support; human and legal rights; and monitoring, research and surveillance, with youth targeted for special focus. Although the interventions are balanced, the emphasis on behaviour change is weakened by the levels of measurement of change. The shift in focus from stand-alone interventions to integrated approach is in line with policy requirements and evidence on effectiveness of interventions. All countries have attempted to implement comprehensive and integrated projects, providing a holistic approach, which is in line with AMREF's strategy.

Since AIDS is rooted in human behaviour and driven by contextual factors, it is crucial that the processes and outcomes related to behaviour change are adequately understood. Most behaviour change projects at AMREF have a life span of two to five years, yet the literature suggests that longitudinal studies and large-scale community-based interventions that incorporate anthropological measures are better than cross-sectional studies in documenting behaviour change processes and outcome measures. The best practices from well known interventions are not fully incorporated into later interventions. It is unclear why some behaviour change interventions such as awareness creation that have not had any sustainable impact are still being implemented. The issue of sustaining livelihoods and cost-effectiveness of interventions remain grey. AMREF has been working with communities such as the truck drivers and slums projects for over 30 years, yet the indicators do not seem to change appreciably. There was only one project targeting men who have sex with men (MSM) and institutionalised populations such as prisons. With increasing urbanisation, AMREF may want to focus on improving the livelihoods of the urban poor.

Funding for HIV interventions appear to focus on provision of VCT and PMTCT services along with condom distribution. From review of the literature and AMREF's experiences in the Mema kwa Vijana Project, the effectiveness of these interventions is context-specific and difficult to generalise to all populations. As argued by Corbett *et al* (2007), implementation of some interventions is on the basis of national appeal rather than what the figures and facts indicate. In most countries, large sums of money are invested in abstinence only and/or VCT programmes without any link to the evidence available. Although the Angaza VCT Project has been scaled up to national level, it has to integrate a VCT component with the other elements of comprehensive care to realise any impact.

4.2 Beyond the data and figures: are the interventions making a difference to individual livelihoods and beneficiary communities?

Effectiveness of behavioural interventions – use of condoms, few partners, more people testing and use of ARVs – can be challenged from the literature. It could be further challenged by epidemiological trends such as multi-drug resistance (MDR), increasing rates of defaulters and the

lurking dangers of cultural malaise and confusion from some religious organisations. Eastern Africa has witnessed such alarming events in the recent past, uncertainty over disbursement of donor funds, adequate supply ARVs, and most recently, alarm over the quality of a certain brand of condoms.

Effectiveness of socio-developmental interventions and especially efforts to strengthen the health system through infrastructure development also has its set of challenges. In addition to the rising poverty in most countries and substance abuse among the youth, there is poor governance that frustrates the efforts of hardworking men and women who want to make a difference in the livelihoods of those they serve.

The Kenya Demographic and Health Survey (KDHS, 2003) results shows that indicators of sexual behaviour and HIV/AIDS knowledge and perceptions were responsible for behaviour change. Age of first sexual encounter for 15-19 year olds has increased since 1993; notable decline in proportion adults with more than one sex partner in the last 12 months and the percentage of those who had been sexually active in the last four weeks; increased consistent use of condom; and those who reported knowing someone who has AIDS or someone who died from AIDS nearly doubled from 1993 to 2003.

According to a UNAIDS summary in 2008, Kenya is one of the few countries in Africa where "a return to HIV investment is starting to show". However, incidence in the country remains high, and a situation analysis by the WHO states that "Kenya faces a severe, generalised HIV/AIDS epidemic that continues to have a devastating impact on all sectors of society". The same warning has been echoed for Uganda's situation. How do we move beyond the figures and facts?

One finding from this analysis is the fact that only 58% of the projects had conducted a baseline survey, only 19% carried out a mid-term review and 75% conducted end-of-project evaluations. Despite the useful information obtained from the baseline surveys, not all of it was utilised to inform programming. For example, the project on youth and HIV in Akaki-Kality had no information on religious groups during the baseline survey, but failed to use this knowledge to design youth-friendly clubs that could take advantage of the infrastructure of the church to sustain their activities.

4.3 Beyond the data and figures: how have HIV and AIDS interventions influenced AMREF's pillars for sustainable health development?

Implications for capacity building of communities for leadership in managing HIV and AIDS interventions

Health systems in the five countries and most of sub-Saharan Africa are ailing and crumbling under the weight of poor governance and stewardship, increasing poverty, rising population growth, and complex epidemiological trends. One of AMREF's pillars is capacity building of individuals and communities to take up responsibility for their health. AMREF does this through training of various cadres of health professionals as well as CORPs, to not only improve the quality of services offered, but more importantly to link the informal community structures to the formal health care system in a more meaningful way.

The good gains AMREF has made over the years in empowering communities to run clinics, for example in Kibera and Entasopia, and in strengthening infrastructure and quality of laboratory services are being eroded by the negative global and national trends in socio-economic and political factors.

Similarly, continued investment in staff at the health facilities and community who move away as a consequence of these negative global trends is unsustainable if the trends are not reversed.

In the context of decentralised health systems, AMREF should take the opportunity offered by the various strategies on community health enacted in most countries from 2006 to strengthen its vantage position as a leader in capacity building for sustainable health development. For HIV and AIDS programming it means consolidating evidence on integrated and comprehensive approaches coupled with meaningfully engaging communities through appropriate linkages to the formal health system.

Implications for community partnering for health systems strengthening and management

AMREF also pursues its mission through building sustainable partnerships with communities and other stakeholders that strengthen health systems to deliver quality health care. To operationalise the community partnering model, capacity building and health policy and practice are important support pillars.

However, as mentioned earlier, these innovative efforts are not immune to the effects of adverse events at national and international levels. In terms of operationalising the model, AMREF should be in the home-stretch phase. However, the community partnering process is neither linear nor bound to happen in the lifespan of a two- or three-year project. AMREF must

find innovative ways of sustaining the spirit of partnering beyond the project life. As the epidemic enters the stable stage, it is more important to mainstream the human rights and ethical approach in the process of community partnering. Some HIV and AIDS projects are already doing this: building sustainable community-based systems in Luwero working with OVCs and the Maanisha Programme working with CSOs and CBOs. The findings will not only be instrumental for consolidating AMREF's own experiences, but inform government policy on how to operationalise human rights approaches at community level.

Implications for policy and practice

The final but equally important pillar is conducting operational and health systems research and advocating for policy change and practice. Have HIV and AIDS interventions been informed by policy? Have the findings from these interventions informed policy and practice? One major question is a framework that provides for exchange of information within this recursive relationship.

Just like behaviour change, policy change is a long-term process, which usually depends on evidence from systematic reviews and syntheses of a body of research, rather than non-replicated evidence from single projects. Therefore AMREF's interventions must incorporate designs that are realistic for monitoring and implementing a policy change.

The gap between programming and research on the one hand, and research and policy is well known. In fact, international initiatives to address this gap have been ongoing in many parts of Africa. Examples include EAC, the GLIA and IRAPP all of which focus on monitoring and evaluation and research co-ordination to improve the HIV responses in the region. Another regional initiative – REACH – is based in Kenya and focuses on translating research results into policy language. Although AMREF and like-minded NGOs formed HENNET, advocacy and policy practice in public health and social development would be enhanced if these initiatives were harmonised through partnerships and representation in meetings or committees. AMREF should institutionalise the process to ensure activities translate into policies which are then practised.

AMREF was part of the team of “innovators” of mainstreaming HIV/AIDS interventions into policies and activities at the workplace through its work with the truck drivers and transport companies in Kenya, Tanzania and Uganda. But after the policies were developed and projects ended, has AMREF been involved in the continual monitoring of the policies to enhance adoption of interventions to changing socio-economic conditions of the communities or the epidemic in the transport sector and communities along truck stops on the Northern Corridor? Are materials developed ten years ago still relevant? Is there need for a policy change in communication strategies?

In a recent regional documentation project (2006), AMREF pioneered the documentation and dissemination of 16 best practices in HIV/AIDS community interventions to inform policy and practice. However, there was no framework for rolling out these best practices at AMREF.

AMREF was also the first to close the evidence gap on the relationship between STIs and transmission of HIV from its Mwanza study between 1989 and 1993. In applying the evidence, the organisation initiated training in syndromic management of STIs based on the new evidence.

4.4 What have we learnt and what are the missed opportunities?

Challenges

The major challenges to effectiveness of HIV and AIDS interventions in Africa include:

- The changing socio-economic context of rising poverty, energy and food crisis
- The changing demographic context of stalled or reversing transitions
- The changing epidemiological context of a stalled, reversing or near stable epidemic and emerging complexities of MDR
- The changing geo-political mapping
- The escalating health care costs
- The impact of the changing technological environment
- Quantity and quality of data

The key issue is how these will inform AMREF's position as a leader in HIV and AIDS interventions for sustainable health development in Africa.

Lessons

The HIV and AIDS epidemic is heterogeneous and not every successful intervention must be scaled up. Most interventions tend to be small-scale and unique to the context. The success of scaling up Angaza, Kibera, Maanisha, Kawempe or the Sangoma initiatives will therefore not be uniform across regions or countries. The challenge is determining the critical minimum effects. AMREF's projects often measure outputs, which are immediate effects, and rarely assess the intermediate effects (outcomes) and long-term effects (impacts).

Despite evidence to the contrary, behavioural interventions still have a national appeal and AMREF needs to find innovative ways of measuring behaviour change and conducting longitudinal studies. Most projects are now designed to include baseline surveys, mid-term reviews and evaluations and there is a component of operations research. However, this information is not used systematically.

Funding for AMREF's interventions has been rising but for the first time indicated a drop in 2008/09. In addition, despite the organisation's efforts to improve health systems, the issue of quality of services and participation continue to influence access and utilisation of services. It has been suggested that there may be other factors besides capacity building and health systems strengthening that can improve the community partnering model.

Certain population sub-groups have not been adequately addressed – MSM, persons with disabilities, male involvement in PMTCT and effects of nutrition and food security on ARVs.

Missed opportunities

The organisation has not made use of the brand names "Flying Doctor Services", "Doctor AMREF" radio programmes and e-learning to tap into opportunities for telehealth in remote areas by using modern technology. Use of mobile phone for improved adherence and monitoring of patient schedules has not yet been incorporated into any of the initiatives.

AMREF started off very well with the "Zero-grazing" AIDS booklets and Afya Journal. However, the real potential of its health learning materials has not been fully realised as a natural launching pad for dominance and expertise in developing manuals, curricula, booklets, developing case studies for training and posters. There is a felt need for production of IEC materials including HIV and AIDS policies at the workplace, but opportunities arising through workplace projects, for example, are not seized.

As the secretariat for the South to South Consultation and a member of the Joint Annual Programme Review (JAPR) of the country's National AIDS control Councils, HENNET, and other national and regional co-ordinating bodies, AMREF already has a formal way of communicating its experiences to inform policy.

Country offices are keen to incorporate operations research into their projects, but at the moment it appears to be an "added agenda" and ways should be found to mainstream operations research including capacity building into all project activities. Opportunities for inter and intra-project communication to harmonise tools and measurement of variables as well strategies for lobbying for policy change are not fully utilised.

Country level experiences suggest a need for regional studies that are longitudinal. Opportunities have been lost for expansion beyond

East Africa to develop HIV and AIDS models. An example is the work with nomadic communities which has not spread to central, southern and western Africa. Most models beyond community partnering appear to be based on one component of the HIV and AIDS continuum, such as VCT, rather than a comprehensive model. Models of quality assurance in laboratory services, for example, need to now go beyond East Africa.

There are numerous opportunities for partnering and networking with NEPAD, EAC, SADEC and other health and development institutions to address the contextual challenges for implementing HIV and AIDS interventions which have not been utilised. The holistic approach is not evident in a number of projects and this may partly be due to donor conditions for funding specific interventions. In addition, the six priority areas appear to promote vertical programming. While AMREF has a few integrated programmes, assessment of the effectiveness of interventions is limited by weak documentation, monitoring and evaluation systems.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

AMREF is an innovator and a leader in HIV and AIDS interventions in Africa and has ably demonstrated this through its wide range of project interventions. The organisation is spot on in terms of being at the right place, for the right reasons and at the right time. The settings for all the interventions address its mission and the government priorities as articulated in the national HIV and AIDS strategic plans. They are also in line with other important regional and international declarations such as the Abuja and Maputo declarations, as well as the MDGs.

However, in order to lay claim to any effects of these interventions, AMREF must be willing and ready to move from its comfort zone and engage a 'higher gear'. For example, it is clear that cross-sectional and descriptive studies without comparison or controls are only going to yield the 'low lying fruits', making it difficult to model best practices.

There is demonstrated need within AMREF to conduct a few large-scale studies, engage more in behavioural studies anchored in anthropology, sociology and psychology, as well as to use a 'longitudinal lens' to clearly demonstrate the processes of behaviour change and the value of community partnering, capacity building and effective operations research for policy influence. Nearly 95% of AMREF's HIV and AIDS programming is based on descriptive studies and situational analyses, mostly baseline and evaluation reports. Most of these tend to yield information on process evaluation and do not always go the whole hog to demonstrate effectiveness of the intervention.

To consolidate its comparative advantage and to maintain its competitive edge as an advocate of the voiceless and vulnerable in the community, it is time to infuse project designs that will provide a strong evidence base on the effectiveness of these interventions. The value of the conclusions drawn from the broad range of HIV and AIDS interventions in Ethiopia, Kenya, South Africa, Tanzania and Uganda lies in the lessons learnt – to improve the design, quantity and quality of data from intervention studies. This is likely to help build the body of knowledge for evidence-driven programming, operations research and policy development.

AMREF's approach to closing the gap between health systems and communities may not be sustainable since formal health systems are continually ailing. However, there is hope if governments devolve the funding to counties, districts, *kebeles*, among others, where communities can draw on these funds to help fix and in some cases re-build the infrastructure. Similarly, the approach to capacity building especially of health facility staff may not have the desired impact unless the work environment and other motivational factors are addressed. At the moment, it seems to give the staff 'wings to fly'. New ways of working with CSOs and CBOs in the communities can be strengthened through the Luwero project in Uganda and Maanisha Community initiatives, among others.

Congruence with government policy agenda can enhance impact. However, the actual roles and responsibilities during implementation are more important than the figures and facts. There is a clear indication of the working relationship among partners on control trials and the quality improvement project for laboratories. For the rest of the regional projects and national projects, there is no clear demonstration that the working relationship with the many partnerships established during the course of project implementation often led to further collaboration on further projects. What should the role of the government be in building these community level partnerships and what responsibilities should it have beyond policy determination and regulatory role?

5.2 Recommendations

Programmatic

In view of the heterogeneous distribution of the HIV epidemic in Eastern and Southern Africa, it is recommended that prevention programmes for specific most-at-risk populations be prioritised and targeted to those regions and groups that are most vulnerable and exhibit increased risk. There is need to re-examine the processes and methodologies applied and how new data should be used to inform

programming. Programme and research managers at AMREF should ensure that there is some basic uniformity in project development and designs and measurement of outcome variables to facilitate comparisons across projects and countries. Similarly, each project should have a checklist showing the nature and source of evidence for documenting a best practice. A few of the projects were initiated without carefully examining the gaps and value of the intervention. There is probably one too many behaviour change projects that did not add value. For a few projects, new interventions were added without benchmarking, thus making it difficult to assess changes.

The principles of and rationale for community partnering are well appreciated within AMREF. However, there appears to be variations in approaches and there is probably need for a handbook based on AMREF's model on how to build sustainable partnerships with communities in Africa.

Policy

AMREF's rich history is likely to be lost as the volume of research increases. It was difficult to find documents on AMREF's initial projects in 1988. Additionally, AMREF's documentation process should by now be 100% digital. There are many valuable documents in hard copy and every time a researcher goes through a folder, something is lost through wear and tear.

To improve opportunities for building a rich database, AMREF should consider a policy of pairing up researchers (a consultant with an internal researcher) to not only help build capacity, but also secure all data for proper documentation and archiving. Use of GPS technology to map areas of operations is a key component of the database.

The pre-2000 projects evolved through add-ons from stand-alone or vertical projects to integrated comprehensive programmes. However, this process makes it difficult to benchmark indicators if the baseline survey did not contain information on the add-ons. For some projects, the monitoring and evaluation still remained vertical despite the add-on components, probably due to different funding agencies. There is need to link capacity building, community partnering and operations research, especially through continuing professional development. For example, capacity building, for example, in nomadic communities should link to the operations research for building the model for community partnering in order to yield quality data and information on the dynamics of partnering. The policy intervention would be a recommended checklist of critical indicators for inputs, process, outputs, outcomes and impact.

Research

More research on relating inputs to processes and outputs to outcomes and impact is necessary. The difficulty of attributing changes in outcome or impact to a specific intervention, for example safe sexual behaviour is not new. The solution to this problem lies in ensuring the quality of evidence driven by the type of project design. Unfortunately, most projects apply the cross-sectional designs rather than experimental, quasi-experimental or observational studies. Designs for interventions should consider longitudinal or cohort studies with controls, in addition to going for the gold standards – experimental design. A common approach adapted to addressing this limitation is triangulation of data sources and methods to link interventions to measurable changes in behaviour. It is therefore strongly recommended that quantitative and qualitative information be adopted as standard while generic tools be developed for specific projects.

With the stabilising of the epidemic, it is crucial that AMREF focuses on incidence and monitoring of new infections along with assessment of prevalence. There are some key areas of research that the organisation should consider to improve measures of behaviour change: incorporate psychologists and anthropologists, design longitudinal studies on behaviour change and incorporate measures of social networks that reveal more on changes in behaviour than self-reporting. Other areas of research should cover the uniformed services besides the police; people with disabilities; the impact of food and nutrition on use of ARVs; use of technology to improve communication and adherence between clients and providers.

The notion that the epidemic has an impact on the environment and use of natural resources has not been effectively addressed through AMREF's interventions. The research should integrate issues on environmental conservation and responsible resource management for sustainable use.

While recognising that priorities should be context-driven, some research areas still stand out as general research areas for HIV and AIDS interventions. Cost-effectiveness of essential or minimum packages of services and determining appropriate packages for youth, urban areas and nomadic communities, are just a few examples.

Research on critical factors for sustaining community-based interventions, especially those linking communities to health systems is essential. What are the necessary ingredients and how do the sufficient conditions vary across communities, regions and countries?

For AMREF to demonstrate outcomes and impacts of interventions, research funding should aim to ensure that behavioural intervention projects are funded for at least five years. This will result in meaningful assessment of outcomes and impacts rather than going for the 'low lying fruits' – ending at output or process level.

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ANNEXES

Annex I: Description of the criteria for best practice

Relevance	Refers to how closely a practice focuses on the HIV/AIDS response in the context of the community in which it is implemented. The intervention addresses priority needs of the target population.
Technical soundness	Using approaches, systems and resources that are of proven quality and appropriateness in the community and conditions where they are being/have been applied.
Accessibility	Intervention is optimally available and within reach when needed by the targeted population
Acceptability	All stakeholders regard the intervention favourably: the beneficiaries (individuals, groups and community), the authorities and professional bodies
Ethical soundness	Sensitive to people's rights, conforms to ethical standards and does not in itself break principles of social and professional conduct or lead to such misconduct.
Innovativeness and value adding	Demonstrates creativity, breaking new ground and continual improvement
Efficiency	This refers to demonstrated capacity to produce desired results with a minimum expenditure of resources - energy, time, money, human resource and equipment.
Partnerships	Community and other stakeholder partnerships for effective organisation and coordination to illustrate the multi-sectoral nature of HIV and AIDS Interventions.
Perceived impact	Anticipated positive change in magnitude of the problem targeted
Demonstrable impact	Actual qualitative or quantitative change in the targeted problem situation that has come about as a result of the intervention

Sustainability	Institutional and financial ability of the intervention to continue effectively and to maintain levels of achievements over the medium to long term after direct funding and other support ends
Replicability	The intervention can be applied in another setting in the same way and produce similar outputs and outcomes

The author is responsible for any technical errors or omissions in this paper.

