
Foreword

The onset of HIV and AIDS has created extraordinary challenges for the public health, social, political and economic sectors of developing countries, of which Malawi is no exception. The epidemic is undermining development gains, changing the nature of development itself in ways that are not yet fully understood, while at the same time exhausting national capacities in an attempt to meet these challenges.

The Malawi Human Development Report 2005 is intended to contribute to the Malawi Growth and Development Strategy, and to the definition and realization of Malawi's Millennium Development Goals (MDGs). Underlying the report is the assumption that unless HIV and AIDS is placed at the center of national planning processes, Malawi's chances of stimulating economic growth, reducing poverty and promoting human development are dramatically reduced.

The report analyses current human development conditions in Malawi in light of HIV and AIDS. Assessing a nation's level of human development represents an attempt to measure the standard of living and well-being of its people—effectively their ability to lead lives that are economically produc-

tive, personally fulfilling and that benefit community and the nation as a whole.

The text argues for a reassessment of, and new parameters for, the national response to the epidemic. It identifies the challenges that lie ahead and that must be overcome if the MDGs are to be achieved and more specifically if the people of Malawi are to enjoy greater opportunities, contribute to the development of the entire nation, and offer a better life and brighter future for generations to come. It calls for the localization of the MDGs, starting with a needs assessment of what it will take for Malawi to achieve the Malawi development goals being elaborated in the Malawi Growth and Development Strategy.

The report itself was prepared by a team of Malawian consultants in collaboration with the National Statistics Office and the National AIDS Commission, with support from UN agencies represented in Malawi, as well as UNDP's Southern Africa Capacity Initiative Programme in Johannesburg, South Africa. UNDP Malawi is delighted to publish this important "home-grown" contribution with the hope of encouraging vital national debate.

Michael Keating
UN Resident Coordinator and UNDP Representative
Malawi

Acknowledgement

We would like to acknowledge and express gratitude to all those stakeholders who contributed and dedicated many hours to producing the Malawi Human Development Report 2005. We are especially grateful to: Dr. Roland Msiska, Coordinator of the UNDP Southern Africa Capacity Initiative Programme, Johannesburg; Mr. Desmond Cohen (who was associated with the Botswana NHDR 2000 on HIV/AIDS); Mr. Hakam Bjorkman, Senior Advisor, Special Initiative on HIV/AIDS at UNDP Headquarters; and Ms. Dudu Chandiwana of the UNDP Southern Africa Capacity Initiative Programme, Johannesburg.

The report was prepared by a team of consultants: Roy Hauya, National AIDS Commission; Prof. Paul Kishindo, Chancellor College University of Malawi; Professor Ndalama George Liomba, School of Medicine, University of Malawi; Derek Zanera, National Statistics Office; Ms. Janet Kathyola, Malawi Institute of Management; and Mr. Mbwigha Denis Mulebe, Ministry of Economic Planning and Development.

Finally, special thanks are extended to the network of UNDP Economists for their comments

on the concept note and to the Core Team members (Prof. Z. Kadzamila, University of Malawi; Mr. Charles Machinjiri and Mrs. Mercy Kanyuka, Commissioner and Deputy of Statistics, respectively, National Statistics Office; Dr. Grace Malandi, Ministry of Agriculture; the late Dr. Wycliffe Chilowa, Centre for Social Research, University of Malawi); and to Mr. Erasmus Morah, UNAIDS Country Coordinator, for the document review and other contributions from the joint UN programme on HIV and AIDS.

Producing Malawi's Human Development Report involved collaborative efforts between UNDP, Ministry of Economic Planning and Development and the National Statistics Office of the Government of Malawi. This report was initiated under the leadership of Mrs. Zahra Nuru, UNDP Resident Representative in Malawi (2000 – 2004), completed under the leadership of Mr. Michael Keating, current UNDP Resident Representative and facilitated by Abdoulie Sireh-Jallow, Economic Advisor, Augustine Bobe, Economist, and Fred Mwathengere, Programme Analyst (HIV/AIDS). The concept note for the report was prepared by John Wayem, Economic Advisor.

November 2005

Contents

LIST OF TABLES, FIGURES AND BOXES	5
ACRONYMS	6
OVERVIEW	8
CHAPTER 1	
THE HIV AND AIDS PROBLEM - STATUS AND DETERMINATION	15
Introduction	15
Status of the Epidemic	15
Geographical Distribution of the Epidemic	16
HIV and AIDS and Socio-Economic Status	16
Determinants of the Epidemic	17
Biological Determinants	17
Behavioural Determinants	18
Sexual Practices	18
Socio-Economic Determinants	19
Gender Determinants of HIV and AIDS	20
Migration and Mobility	22
Conclusion	23
CHAPTER 2	
IMPACT ANALYSIS OF THE EPIDEMIC	24
Introduction	24
HIV and AIDS at Micro Level	24
Individual	24
Household	24
Business Sector	25
Government	25
HIV and AIDS at Macro Level	26
Effects of HIV and AIDS on Literacy Levels and Human Development	27
Longevity and HIV and AIDS Links	27
The Impact of HIV and AIDS in Malawi	27
Impact on the Education Sector	30
Impact on the Health Sector	31
Impact on Agriculture Production and Food Security	32
Impact on the Business Sector	32
Impact on Governance	33
Conclusion	33

CHAPTER 3	
THE NATIONAL RESPONSE PARAMETERS TO THE HIV AND AIDS EPIDEMIC -----	34
Introduction -----	34
The Early Years: 1985-1997 -----	34
Medium Term Plans and National AIDS Control Programme -----	34
Shortfalls in the Early Response -----	34
The Middle Years: 1998-2004 -----	35
National Mobilization and Action Planning -----	35
Strengthening National Coordination -----	36
Achievements and Prospects -----	36
National Response Successes -----	39
Growing Access to Critical Bio-Medical Services -----	40
Conclusion -----	42
CHAPTER 4	
POLICY RECOMMENDATIONS FOR FOCUSING THE NATIONAL RESPONSE PARAMETERS -----	43
Introduction -----	43
Major Gaps in the National Response -----	43
HIV and AIDS and National Development Policy Framework -----	43
“Systemic National Response” Evolution -----	43
Leadership and Coordination Capacity -----	43
Health Sector Leadership in the Response -----	44
Focus on most “At Risk Groups” -----	44
Integration of Gender in Strategic Frameworks -----	44
Access to and Quality of Critical Bio-Medical Services -----	44
Inaccurate and Untargeted Communication Materials -----	45
Limited Attention to High Impact Issues and Interventions -----	45
Policy Recommendations -----	47
Addressing Human Resource Needs -----	47
Mainstreaming HIV and AIDS Agenda in the Public and Private Sectors -----	48
Scaling Up Bio-Medical Services -----	48
Focusing Intervention on most “At Risk” Groups -----	49
Breaking Silence, Stigma and Discrimination -----	49
Addressing Poverty -----	50
Conclusion -----	50
BIBLIOGRAPHY -----	51
APPENDIX -----	54
Technical Notes -----	53
Trends in Human Development in Malawi -----	57

List of Tables, Figures and Boxes

Table 1.1	Trends in HIV and AIDS Indicators	15
Table 1.2	HIV Infection in Adults by Region	16
Table 1.3	HIV Prevalence Among ANC Women in Selected District Sites in 2003	16
Table 1.4	Gender Disparities in Education Attainment	16
Table 1.5	HIV Prevalence Among ANC Attendees by Level of Education	17
Table 3.1	Strategic Management Plan (SMP) - Funding Detail by Donor (2003 - 2009)	36
Table 3.2	Expanded HIV and AIDS Programme Funding (Non-NAC+SMP)	37
Figure 1.1	HIV Prevalence by Partners' Occupation	17
Figure 1.2	Intergenerational Sex	22
Figure 2.1	Effect Channels of HIV and AIDS	24
Figure 2.2	Orphans in Malawi (1985 - 2005)	29
Figure 2.3	Problems Experienced by Children and Families Affected by HIV and AIDS	30
Box 1.1	STI Prevalence	18
Box 1.2	Some Findings from CPEP Study on Culture of Silence	18
Box 1.3	Findings on Condom Use	19
Box 1.4	Examples of Harmful Traditional Practices	20
Box 3.1	Sector Coordination Framework	38

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
ART	Anti-Retroviral Therapy
BCAAM	Business Coalition Against AIDS in Malawi
CBCC	Community Based Childcare Centre
CBO	Community Based Organisation
CDA	Community Development Assistant
CHBC	Community Home-Based Care
CPEP	Community Population and Education Project
DA	District Assembly
DACC	District AIDS Committee
DHRMD	Department of Human Resource Management Development
DHS	Demographic Health Survey
DOT	Directly Observed TB Treatment
GBV	Gender Based Violence
GDP	Gross Domestic Product
GESP	Gender Equality Support Project
EU	European Union
FBO	Faith Based Organisation
FHI	Family Health International
FMA	Financial Management Agency
GoM	Government of Malawi
HBC	Home Based Care
HIPC	Highly Indebted Poor Countries
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
JICA	Japan International Cooperation Agency
MACRO	Malawi AIDS Counselling and Resource Organisation
MANASO	Malawi Network for AIDS Service Organisations
MANET+	Malawi Network of People Living with HIV/AIDS
MBCA	Malawi Business Coalition on HIV/AIDS
MBTS	Malawi Blood Transfusion Service
MEPD	Ministry of Economic Planning and Development
MGCS	Ministry of Gender and Community Services

MLVT	Ministry of Labour and Vocational Training
MTCT	Mother-to-Child-Transmission
MTP	Medium Term Plans
NAC	National AIDS Commission
NACP	National AIDS Control Programme
NAF	National Action Framework on HIV/AIDS
NAPHAM	National Association of People living with HIV/AIDS in Malawi
NEC	National Economic Council
NGO	Non Governmental Organisation
NSF	National Strategic Framework
NSO	National Statistics Office
PMTCT	Prevention of Mother-to-Child Transmission
PRSP	Poverty Reduction Strategy Paper
SSR	Sentinel Surveillance Report
STI	Sexually Transmitted Infection
TB	Tuberculosis
TWG	Technical Working Group
UNAIDS	United Nations Joint Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNV	United Nations Volunteer
USAID	United States Agency for International Development
USD	United States Dollar
VCT	Voluntary Counselling and Testing
VSO	Voluntary Services Overseas
WHO	World Health Organisation

Overview

Development can be described as the outcome of action stemming from a dynamic and integrated relationship between individuals (combined to form households), firms (combined to form industries) and government, all working in a cohesive and mutually beneficial manner. The efficiency and effectiveness of each component is interdependent. If the capacity of any component is eroded by HIV and AIDS, it affects the capacity of the “group relationship” as a whole. When individuals therefore are infected by HIV and AIDS, all components of the relationship suffer.

Since 1991, Malawi has ranked amongst the bottom 20 countries worldwide on the Human Development Index; the result of poverty compounded and exacerbated by HIV and AIDS. Still, the nation’s HIV prevalence rate has stabilized at close to 14% – signifying a degree of progress in meeting the sixth Millennium Development Goal of combating HIV and AIDS, Malaria, Tuberculosis and other major diseases. The targeted goal to halt and reverse the HIV and AIDS rising trend has been partially achieved during the past five years. In 1999 the rate was measured at 14.67%, but by 2003 had dropped to 14.41%. Emphasis now should focus on accelerating the rate of decline so that by 2015, targets are met and HIV is controlled.

More encouraging is Malawi’s progress when compared regionally. In southern Africa, nations have on average, a HIV and AIDS prevalence of 20% – 30%. Thus while Malawi’s success to date

is marginal, there remains reason for optimism. For example, the infection level amongst young women (15 – 24 years) attending antenatal clinics (ANC) in Lilongwe has declined from 26% in 1996 to 16% in 2003. And for all ANC attendees in Lilongwe, the infection has reduced from 26% in 1998 to 17% in 2003. The Central region has also consistently registered the lowest rates, although the prevalence in Blantyre, Mzuzu and several semi-urban areas still remain high, between 20% – 35%.

The national response undertaken during the middle years (1998 – 2000) and the delayed outcomes from earlier interventions have apparently aided in initiating this trend reversal. During this period, government and UNDP collaborated in planning and coordinating a nationwide community mobilization, capacity building and strategic planning effort to support communities, institutions and organizations in developing the ability to discuss, more openly, issues about HIV and AIDS, and in responding more effectively to its challenges.

By “breaking the silence” and stimulating debate, individuals, communities and institutions, the elite and religious organizations cultivated a deeper knowledge and understanding about the nature and impact of HIV and AIDS, and therefore became better equipped to offer more effective and sustained responses. As a result, Malawi’s first National HIV and AIDS Strategic Framework (NSF) was developed and implemented during the pe-

riod 2000 – 2004, which became a strong rallying point for programming and resource mobilization. In March 2000, during a Resource Mobilization Round-Table, donors and partners pledged over USD 100 million and reinforced their commitment to fight HIV and AIDs.

The Malawi Human Development Report 2005 is presented in four chapters. **Chapter 1** outlines the status of HIV and AIDS in Malawi based on the Sentinel Surveillance Report (SSR) produced in 2003. The determinants, derived from numerous published reports, focus on knowledge, attitudes and beliefs, sexual practices, cultural norms and practices, socialization processes and guardianship of social beliefs, among others. This chapter explains the extent of the HIV epidemic in Malawi and emphasises, in particular, women and young girls as the most vulnerable populations. The determinants contributing to the spread of HIV in Malawi, as in many African countries, are behavioural, economic and socio-cultural. In order to significantly reduce further spread of the virus, several areas must be addressed. Current responses will require additional investigation to assess the extent to which they focus on underlying socio-economic and gender issues – the core of the epidemic. A transformed, targeted and empowered approach must link HIV prevention and impact mitigation to poverty reduction strategies.

For women and young girls, their poverty, limited access to education and lack of participation in decision-making roles must be addressed as priorities. Cultural practices and gender-based norms, which promote HIV transmission, should be reviewed and men's attitudes towards women and sexuality must be changed. Young men should be counselled to resist imitating harmful practices from foreign cultures that promote sexual experimentation. Condom use, including female condoms, requires more effective promotion. The laws dealing with rape, defilement and women's rights to property inheritance need to be strengthened.

Chapter 2 concentrates on the impact of HIV and AIDS on household welfare, orphaned children, the extended family, educational and health sectors, agricultural production, business enterprises and public service delivery. Although the effects of HIV and AIDS are mainly understood to affect human development, the reverse is also true. HIV and AIDS typically lead to illness and death, reducing productivity and depleting and depriving the work force of skilled labour. Absenteeism and attrition that result threaten both the quality and quantity of services that organizations provide to the public.

Progression of the disease from the point of infection to full blown AIDS may occur over a period of several years; however, diagnosis alone can prove cause enough for severe emotional trauma. And once the diagnosis is revealed publicly to friends, work colleagues and family, the infected individual may then be shunned because of associated stigma. As the disease continues to progress, so too does the frequency of opportunistic infections experienced, weakening and rendering the person less productive and more dependent on others. The inevitable premature death that follows robs the individual of a fulfilling and productive life and eliminates potential contributions to the welfare of family and society as a whole.

When HIV and AIDS factor into the equation at household level, consequences can be economically devastating for a family. Household income may reduce dramatically when a breadwinner falls ill or dies, exacerbating the depth of poverty. Family coping mechanisms are further tested as expenditures increase to meet treatment needs of the sick, which often deplete household savings and result in the liquidation of assets. Some family members may have to devote their time to caring for the sick relative rather than on income earning activities.

Children are perhaps the most severely affected

by the epidemic. A nationwide child labour survey conducted in 2003 revealed that poverty was the most critical factor forcing children aged 5 – 17 years into the work force (MLVT and NSO, 2004). And those children living in households affected by the epidemic are more likely to enter the work force than those from non-affected households. The added high mortality amongst adults as a result of AIDS multiplies the tragedy by producing greater numbers of orphaned children. According to the National AIDS Commission (NAC), an estimated 840,000 children under 18 years were orphans in 2003. Of these children, approximately 45% were orphaned due to AIDS-related deaths of one or both parents (NAC, 2003). With this rise in orphan numbers, a new dimension to the family unit has been created – child-headed households. These households, often headed by children as young as 10 years, either depend on charity for survival or the child-heads are forced to work to support younger siblings.

In the education sector, literacy levels are being threatened as the epidemic affects and infects both teachers and pupils. The educational system is struggling to cope with staff shortages that affect the delivery and quality of lessons and ultimately may lead to low achievement levels, higher dropout and repetition rates and consequently, lower literacy levels. As teachers or their family members infected with the virus become ill from opportunistic diseases, high levels of absenteeism result. Bennel, et al (2002) found that personal illness and attendance at funeral services each accounted for 35% – 45% of teacher absences from school. Death was reported as the major cause of attrition among qualified primary school teachers in the public service between 1997 and 2000 (UNDP, 2002). About 66% of teacher deaths could be attributed to HIV and AIDS.

Similarly, as the epidemic advances the number of sick children who dropout of school increases. Many of the estimated 70,000 children under 15

years who were living with HIV in 2003, may be too sick to start or continue with school, or may have already died.

Professionals and skilled workers in the health sector have also been stricken by AIDS and are among the nearly 80,000 people who die annually from the disease. The epidemic has reduced both the quality and quantity of health care workers and worsened the results of health indicators. Maternal mortality, for example, has increased from 620 per 100,000 to about 1,120 per 100,000 pregnant women. Life expectancy estimated now at 42 years, would have been 56 years without the presence of HIV and AIDS. An alarming 14 years have been lost to the epidemic. The number of new TB cases in 2003 was approximately 30,000; without HIV and AIDS the number would have been 10,000 cases (NAC, 2003). An UNDP (2002) report found that staff deaths in the Ministry of Health proved the primary cause of attrition above all others. Most of the deceased were young adults aged 30 – 44 years, according to the National AIDS Commission.

AIDS has also taken hold of the agriculture sector by affecting the labour force and income. Loss of agricultural labourers during crucial periods of planting and harvesting can significantly reduce crop production. With a reduced labour force, the problem may worsen as farmers are more likely to plant less labour intensive crops. Frequently this results in substituting export crops for food crops. Palamuleni, et al (2003) found that prolonged illness of a family member led to delayed farm operations and abandonment of labour intensive crops in favour of those less labour intensive. HIV and AIDS-related illnesses and deaths in households heavily dependent on agriculture also threaten food security. Greater time may be spent on caring for the sick, attending funerals and mourning than on food production. A study carried out by Zomba Rural Development Project in 2003 revealed that HIV and AIDS affected households produced 14.8% less food than non-affected

households (Phiri, et al, 2004). The study also found that illness related absenteeism and a shortage of staff increased staff workloads in the agricultural extension service that in turn reduced the number of extension visits. Instead of the recommended fortnightly visits, the study showed 21.1% of small-scale farmers were visited only twice a month, while 47.9% received no visits at all. In the small-holder agriculture sector where alternative sources of technical information are limited, the absence of extension visits deprived farmers of useful information which may have adversely affected production, particularly of new crops.

High death rates in some rural areas have left many gardens uncultivated as those with the property rights have died. In matrilineal Machinga, high mortality among the women has created opportunities for men to acquire the land from the deceased, normally an opportunity not afforded according to custom. This situation may represent the beginning of male encroachment on female land rights in a matrilineal social system. A number of leasehold estates also lay abandoned or partially cultivated as the survivors lacked resources to fully work the land.

Although there is a paucity of data on the effect of HIV and AIDS on business enterprises, Jones' (1996) study of Makandi tea and coffee found that HIV and AIDS accounted for 3.4% of the estate's gross profits during the 1995 – 1996 fiscal year. Small- and medium-scale businesses are particularly vulnerable to HIV and AIDS-related illnesses and deaths. In 2001, such proprietors operated 60% of Malawi's enterprises; of the remaining enterprises, 97% employ one to three people. Premature deaths of entrepreneurs increase defaults on loans for small- and medium-scale enterprises. Palamuleni, et al (2003) found that 60% of businesses owned by people living with HIV and AIDS experienced a decline in income because part of the capital was diverted for treatment and other household needs; in some

cases business was undertaken irregularly.

A reduction in the work force has serious consequences for governance. The initial impact felt from the problem of reduced lifespan at societal level is a loss of human resources, including experience and established networks. An increased demand exists therefore to recruit and train individuals to fill vacancies. However, training institutions are not capable due to resource limitations, to produce replacements fast enough. Inefficiencies develop in public institutions as posts are left unfilled and senior employees are required to assume the duties of absent subordinates, or inexperienced juniors are promoted rapidly (de Waal, 2003). State institutions are faced with the challenge of maintaining their viability in the context of a rapid staff turnover and shorter working lives. The quality of service provision is threatened by institutional decline, and so too is the capacity to meet the challenges arising from the epidemic.

Chapter 3 deals with the national response to HIV and AIDS. It focuses on the early years (1985 – 1997), followed by the period 1998 – 2004 highlighting the achievements and prospects as a result of the response. During the implementation of the National Strategic Framework, Malawi adopted “**the three ones**” strategy, which involves developing **one** broad-based strategic planning framework for all stakeholders; **one** functional national authority to provide leadership and coordination; and **one** national monitoring and evaluation system to collect data and to guide all efforts in measuring the progress and impact of interventions. The principle of “three ones” has now become the cornerstone for coordinating national HIV and AIDS responses and it is well supported by donors and development partners globally.

Many development partners have identified the HIV and AIDS epidemic as an area of priority. A “progressive partnership” has evolved between NAC and bilateral and multilateral development

partners. The HIV and AIDS Technical Working Group (TWG) set up under NACP was broadened by NAC and became the linchpin for monitoring progress in the response. The coordination role of the Commission was further strengthened in August 2002 when it was relocated to the Office of the President and Cabinet, giving NAC greater visibility. The NAC Trust Deed was revised and a process initiated with government for an Act of Parliament to strengthen the legal status and mandate of the Commission.

National response to date has been responsible for several major successes, which include an increased general knowledge and awareness about HIV and AIDS, enhanced knowledge about condoms and their use, promotion of community home-based care and improved precautions to ensure safe blood supplies and universal prevention measures. Interventions also expanded access to critical bio-medical services, including addressing the demands for voluntary counselling and testing services, progressing the prevention of mother-to-child transmission programme, and scaling up the provision of antiretroviral therapy.

Chapter 4 concludes by offering policy recommendations for redefining the national response to the epidemic. It looks at the gaps in the national response that need to be filled to generate the acceleration necessary to lower the prevalence rate of HIV and AIDS. A number of parameters for the response are redefined in order to determine the effects of HIV and AIDS on individuals, as well as on the economy. The revised parameters are also expected to form the basis of redirecting local and donor resources. Lessons drawn from the failures of past responses will contribute to redefining the parameters and chart future interventions. The policy recommendations put forward are summarized as follows:

- **Address human resource needs**

With the severe shortage of human resources in both the public and private sectors, the quality and

delivery of essential services, including those HIV and AIDS-related, are seriously challenged. Education, health and agriculture are affected in particular as the numbers of nurses, clinical officers, schoolteachers and agricultural extension workers decline. Recommendations therefore include establishing, in the short-term, a means to address the crucial shortages and a long-term strategy that ensures sustainability and retention of the work force once the urgency of the situation has diminished.

Immediate action should focus on relieving the vital resource shortages affecting the delivery of essential services. Recruitment of foreign nationals, volunteers and retired nationals on fixed term contracts of no more than five years and the encouraged return of those nationals working outside the country by means of incentives could help rapidly improve the current dilemma. Preventing further loss of competent, skilled personnel to more attractive employment opportunities abroad and from AIDS-related deaths require dialogue with the international community and the provision of ARVs and other drug therapies to treat the disease and opportunistic infections.

Universities and institutions of higher learning should review and revise their policies that restrict student enrolment numbers for critical professions such as nursing, the education of health technicians and agricultural extension workers. Greater enrolments are also necessary within the Malawi Police Force and Army, both suffering from high attrition rates believed to be HIV and AIDS-related.

- **Mainstreaming HIV and AIDS agenda in public and private sectors**

With HIV and AIDS crossing all segments of society, public and private sectors should assume responsibility for mainstreaming an HIV and AIDS approach in all core business activities. Government policy currently supports a 2% budget allocation for HIV and AIDS activities within each

government ministry and department; however, execution of such programmes by several ministries and departments is not possible due to capacity issues. This also holds true for many city and district assemblies charged with decentralizing HIV and AIDS activities to the community. Addressing the problem requires technical expertise to help speed up implementation of HIV and AIDS programme activities. Establishing facilities that simplify grant application mechanisms and increase the pace in awarding them could help greatly. Finally, guidelines for monitoring the public sector to ensure the 2% annual budget allocation for HIV and AIDS activities is implemented as planned, should be put in place.

- **Scaling up biomedical services**

Access to **voluntary counselling and testing (VCT) services** is improving but still remains low in many rural areas. The number of health care workers and others trained to provide HIV and AIDS counselling, conduct HIV testing and to manage ARV therapy is inadequate. Recommendations to address these problems include the need to decide on and support an aggressive, rapid scale up intervention programme that will increase the number of people on ARV therapy and ultimately contribute to an improved manpower base. Accomplishing this goal, however, demands that greater numbers of health personnel be trained to manage ARV therapy. To meet this target, training institutions could include ARV management as part of their curriculum for doctors and clinical officers, prior to graduation.

Access to services for **prevention of mother-to-child transmission (PMTCT)** of HIV by pregnant women is inadequate (only 3%) in Malawi. Typically pregnant women must volunteer to receive HIV counselling and testing services, which are limited to only a few hospitals. To increase access and at the same time prevent vertical testing, a public health approach is suggested to include screening of all pregnant women and providing treatment for all those infected along with

their children. However, public dialogue is necessary for the community to appreciate and understand this approach to the epidemic. Prevention of mother-to-child transmission services could also provide an alternative arrangement for the large number of women who attend antenatal services but who prefer to deliver at home in absence of formal health care providers.

Implementing the EU supported **Malawi Blood Transfusion Service (MBTS)** project needs to be sped up to ensure blood transfusions do not depend upon donations from HIV infected relatives, but rather from voluntary, non-remunerated donors. To facilitate the process, training in the appropriate use of blood and blood products should be part of the formal training of medical undergraduates and clinical officers. Furthermore, sustainability approaches for the MBTS after EU funding is depleted need to be planned for to ensure continued availability of safe blood for transfusions. Knowledge and practice of universal safety precautions should become an institutionalized part of bio-medical sciences training.

Condom promotion and use offer opportunities to reduce HIV infection. Presently, use in Malawi is embattled with confusing messages from faith-based organisations articulating a moralistic approach to HIV and AIDS prevention. Preventing HIV and AIDS should promote methods that combine the benefits of both abstinence and condom use. HIV and AIDS programmes must emphasize that no single strategy will prevent infection for those at risk.

Bio-medical services requires the support of the health sector, with the Ministry of Health at the helm. It is recommended that the ministry urgently reconstitute and strengthen its HIV and AIDS Unit and ensure an adequate mix of essential skills.

- **Focusing intervention to “most at risk” populations**

The epidemic is shifting to the Northern region

and rural areas, suggesting that organisations may be less actively involved in HIV and AIDS activities in these parts of the country. Also in some districts, cultural practices play a crucial role in daily life that can increase the risk of HIV infection. These areas require greater HIV and AIDS specific programme interventions.

Girls and women are the fastest growing populations of HIV infected persons. Girls should be encouraged to remain in school longer and issues leading to early dropout need to be addressed. Literacy classes, combined with training on income generating activities, can reduce poverty that often puts girls at risk of HIV infection by engaging in sex with older men in exchange for money. These and other successful projects need to be multiplied in various regions of the country.

Men too should be targeted, especially those with disposable income. Men usually determine the circumstances associated with intercourse, have more chances to contract and transmit HIV and often refuse to protect themselves with condoms.

- **Breaking the silence, stigma and discrimination**

Leaders at all levels should lead by example and promote open discussion of HIV and AIDS to help reduce associated stigma and discrimination.

- **Affected poverty**

While remedies for addressing poverty in Malawi are beyond this report, the need for meaningful inroads must be made in this area if further spread of HIV and the impact of AIDS are to be reduced.

CONCLUSION

HIV and AIDS is threatening to reverse Malawi's human development gains. By reassessing the national response, several short-comings have emerged that have contributed to the nation's failure to control and reduce the prevalence of the epidemic. Yet, understanding these deficiencies has created new opportunity to redirect response parameters that will enhance and accelerate future efforts in reducing HIV and AIDS and in realizing Malawi's Millennium Development Goals.

The HIV and AIDS Problem - Status and Determination

INTRODUCTION

Chapter 1 presents a situation analysis of the HIV and AIDS epidemic in Malawi, focusing on modes of transmission and determinants of the disease. It also establishes a basis for analysing the impacts that are discussed in chapter 2.

STATUS OF THE EPIDEMIC

Malawi is one country in sub-Saharan Africa severely affected by the HIV and AIDS epidemic. The latest findings shown in Table 1.1 indicate a 14.4% prevalence rate amongst adults aged 15 – 49 years (NAC, 2003); a significant level since the country's first diagnosed case of AIDS in 1985. The table also highlights a 7.7% increase in HIV and AIDS prevalence between 1987 and 1992, but both incidence and prevalence rates had stabilized between 1997 and 2002. However, the

actual number of people infected and living with HIV and AIDS has in fact increased over the years. For example, in 1987 there were only 52,251 people living with the epidemic. This figure increased to 750,108 by 2002 and by 2003 a total of 760,000 Malawians aged 15 – 49 years were living with the disease, 58% of whom were women. HIV infection rates in young girls and women tend to be much higher than in boys and men of corresponding age (under 30 years). In 2003, approximately 900,000 Malawians were HIV infected, including 70,000 children (0 – 14 years) and 60,000 adults over 50 years old. Still, almost 10 million remained HIV negative.

GEOGRAPHICAL DISTRIBUTION OF THE EPIDEMIC

Table 1.2 illustrates the geographic distribution of HIV and AIDS in Malawi for 2001 and 2003.

TABLE 1.1:- TRENDS IN HIV AND AIDS INDICATORS

	1987	1992	1997	2002	2003
HIV Population					
Total	52,251	356,669	649,255	750,108	760,000
Males	30,015	163,141	272,798	316,875	320,000
Females	22,234	193,527	376,545	433,232	440,000
Prevalence (%)	1.6	9.3	12.2	14.4	14.4
New HIV Infections					
Total	21,942	88,539	71,490	76,760	
Males	11,541	37,494	30,411	34,270	
Females	10,401	51,045	41,079	42,490	
Incidence (%)	0.8	3.0	2.5	2.4	

Source: NAC - Malawi National HIV/AIDS Estimates 2003 Technical Report

The difference between the total numbers and sum of males and females is due to cases where the sex was not indicated and could not be determined.

According to this table, HIV and AIDS prevalence was higher in urban areas (23%) than in rural areas (12.4%). The epidemic spread more rapidly in the Northern region compared to the Central and Southern regions, suggesting the need for more concentrated interventions in this part of the country. No studies have yet been conducted that empirically explain the reason for this rapid spread to the north, but contributing factors could include cross border trading between Malawi and Tanzania, along with inadequate HIV and AIDS interventions in this region.

TABLE 1.2:- HIV INFECTION IN ADULTS BY REGION

Region	Prevalence Rate (%)	
	2001	2003
Urban Adult		23.0
Rural Adult		12.4
Southern Region	19.0	19.5
Central Region	11.0	9.7
Northern Region	10.0	11.3
National (15-49 yrs)	15.0	14.4

Source: National AIDS Commission

Table 1.3 shows the prevalence rates among antenatal clinic (ANC) attendees in selected districts and sites. Nsanje district suffered the highest rate of 32.9%, an increase from 21% in 1997. This 11.9% rise is the highest ever recorded in Malawi, yet reasons for this rapid gain are still unknown.

HIV AND AIDS AND SOCIO-ECONOMIC STATUS

Current literature on the epidemic correlates illiteracy and poverty levels with a high prevalence of HIV and AIDS. The 1998 Integrated Household Survey indicates that 65.3% of Malawians were living below the poverty line and women were the majority of these poor. Education indicators showed that 73.8% of males were literate as compared to 48.9% females (NSO, 2002). Table 1.4 shows the differences in literacy between sexes

TABLE 1.3:- HIV PREVALENCE AMONG ANC WOMEN IN SELECTED DISTRICT SITES IN 2003

Sentinel Site	Locality	% HIV+
Kaporo Health Centre	Rural	20.5
Mbalachanda Health Centre	Rural	14.5
Rumphu District Hospital	Semi-Urban	16.2
Nkhata Bay District Hospital	Semi-Urban	24.1
Mzuzu Health Centre	Urban	20.8
Kamboni Health Centre	Rural	6.7
Thonje Health Centre	Rural	11.4
Kasina Health Centre	Rural	7.2
Mchinji District Hospital	Semi-Urban	18.1
St. Anne's Mission Hospital	Semi-Urban	9.9
Ntcheu District Hospital	Semi-Urban	22.0
Lilongwe Bottom Hospital	Urban	16.9
Gawanani Health Centre	Rural	17.0
Milepa Health Centre	Rural	15.1
Mianga Health Centre	Rural	23.2
Mangochi District Hospital	Semi-Urban	14.5
Mulanje Mission Hospital	Semi-Urban	2.9
Nsanje District Hospital	Semi-Urban	32.9
Limbe Health Centre	Urban	27.6
Total		19.8

Source: NAC; HIV Sentinel Surveillance Report 2003

TABLE 1.4:- GENDER DISPARITIES IN EDUCATION ATTAINMENT

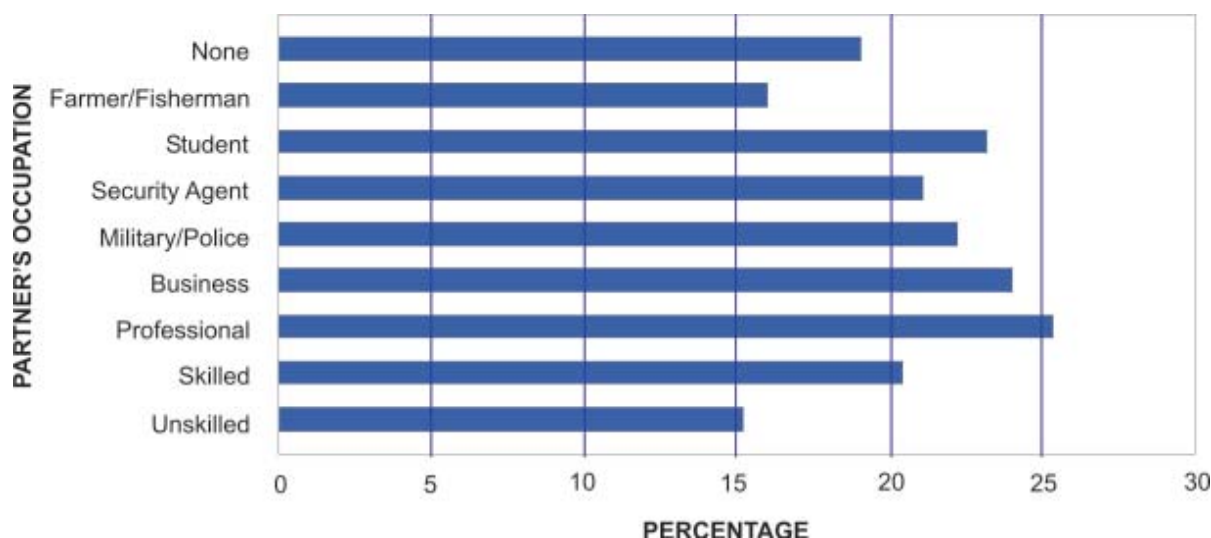
Education Level	Females %	Males %
No Education	27.0	10.4
Primary Education		
4 Years	30.4	29.0
8 Years	31.4	40.2
Secondary Education	11.0	19.0
Tertiary Education	0.1	0.5

Source: Demography and Household Survey 2002

are primarily due to women's limitations in accessing and achieving levels of education.

Yet, other data available in the country appear to refute many findings that positively correlate illiteracy and poverty with a high prevalence of the epidemic. Figure 1.1 highlights the HIV prevalence among ANC attendees according to partners' occupation. It reveals an increase in occurrence of the virus in women whose partners were businessmen, skilled workers or professionals, and

FIGURE 1.1:- HIV PREVALENCE BY PARTNERS' OCCUPATION



Source: HIV Sentinel Surveillance Report 2003

lower in women whose partners were farmers/fishermen. This implies that those living in a higher socio-economic bracket are more predisposed to HIV.

The data presented in Table 1.5 on HIV prevalence based on education level of ANC attendees also support a positive correlation between high levels of education and a high prevalence of HIV and AIDS. A significantly higher incidence of HIV infection amongst women who had achieved a secondary level of education was evident, compared to those who had no education or only completed primary school.

Based on the findings, greater interventions amongst people of higher socio-economic backgrounds may be warranted.

TABLE 1.5:- HIV PREVALENCE AMONG ANC ATTENDEES BY LEVEL OF EDUCATION

Education Level	Total Sample	HIV+	% HIV+	95% Confidence Interval
None	1,921	369	19.2	17.5 - 21.1
Primary	4,785	913	19.1	18.0 - 20.2
Secondary	1,201	279	23.2	20.9 - 25.7
Post Secondary	68	19	27.9	17.7 - 40.1
Total	7,975	1,580	19.8	19.0 - 20.7

Source: NAC - HIV Sentinel Surveillance Report 2003

DETERMINANTS OF THE EPIDEMIC

The primary mode of spreading HIV in Malawi is unprotected heterosexual intercourse, which accounts for 88% of the transmissions. Mother-to-child transmission (MTCT) is responsible for 10% of the infections and other unsafe practices cause another 2%. The determinants discussed in this report will focus on heterosexual intercourse, the most common means of transmission.

While every individual is physiologically susceptible to HIV if exposed, transmission by sexual intercourse only becomes risky when conducted in an unsafe environment. Determinants of the infection are thus examined in terms of individual risk that emanates from people's attitudes and behaviours, as well as the socio-economic environment that influences people's participation in risky behaviours.

Biological Determinants

Prevalence and treatment of sexually transmitted infections (STIs)

The very presence of sexually transmitted infections (STIs) in individuals can facilitate the spread of HIV by providing an effective port of entry for the virus. According to the 2000 DHS, women,

particularly those married, and single men were disproportionately affected by STIs, as outlined in Box 1.1. The transmission of HIV from an infected man to a woman occurs more readily than from a woman to a man. Because women have a large genital mucosal surface, they may be more predisposed to HIV than men. The virus is more easily transmitted to a woman through sexual intercourse, especially if she has suffered tears or abrasions in her genital wall. Semen also remains in the female genital tract longer than penile contact with vaginal secretions, again exposing the woman to greater risk of infection. Women infected with HIV have shown high concentrations of the virus in their urethral and vaginal secretions.

BOX 1.1:- STI PREVALENCE

- 11% of women and 8% of men had STIs 12 months prior to the survey
- 11.3% of married women reported having STIs compared to 6.8% of unmarried women
- 11.3% of unmarried men had STIs as compared to 6.6% of married men

Source: Malawi Demographic and Health Survey (MDHS), 2000

The high prevalence of HIV in-country can be attributed to a number of reasons. For example, treatment sought in reproductive health and STI treatment facilities are limited, primarily due to the stigma associated with STIs and the preference for therapy from traditional healers. Many women also fear reprisal from their spouses if they are treated for STIs. Others believe that vaginal itching or discharge is normal and therefore may not seek treatment at all.

Behavioural Determinants

Knowledge, attitudes and beliefs about sex and HIV and AIDS

Knowledge about HIV and AIDS and prevention measures in Malawi is effectively universal. The DHS (2000) reports that over 90% of Malawians had heard about HIV and AIDS and knew how to protect themselves from infection, regardless of gender, education, residential, and marital sta-

tus. However, this knowledge had not translated into positive behaviour change. Many people continue to practice risky sexual behaviours and remain reluctant to take advantage of voluntary counselling and testing (VCT) services.

A “culture of silence” still exists on matters related to sex and sexuality as customs prevent public scrutiny and debate on these subjects. Box 1.2 summarises some of the findings from a study conducted by the Community Population and Education Project (CPEP) in the Ministry of Gender and Community Services in 2001, illustrating sexual taboos. As long as discussions are prohibited on matters related to sex, the risk of HIV infection will continue because many lack vital information on sexual and reproductive health matters that could prevent its spread.

BOX 1.2:- SOME FINDINGS FROM CPEP STUDY ON CULTURE OF SILENCE

- Most parents did not discuss reproductive health issues with their children because it was considered culturally unacceptable
- Some parents feared that these children might experiment based on issues discussed
- Girls could not suggest condom use to their boyfriends for fear of being suspected of being promiscuous and infected

Sexual Practices

Early sexual debut among the youth

The majority of young and single people are engaging in sexual intercourse. According to the 2000 DHS, 67% of single men and 38% of single women reported having had sex in the 12 months prior to the survey. Evidence also supports that the age of sexual debut is young, with over 50% of youth experiencing their first episode of sexual intercourse before the age of 15 years (Coombes, 2001). Engaging in sexual intercourse at these young ages increases the risk of HIV infection among the youth.

Unprotected sex and multiple sex partners

Male condoms are promoted as a means of fam-

ily planning and to prevent STIs, including HIV and AIDS. They are readily available in most parts of the country, with an annual supply estimated at 19 million pieces. Although 80% of adults believe condoms are safe and effective (DHS, 2000), condom use by men is reportedly low and even lower amongst women, as shown in Box 1.3.

BOX 1.3:- FINDINGS ON CONDOM USE

- 14% of men reported having used a condom in their last sexual encounter as compared to 5% of women
- Condom use with casual partners is lower among young men aged 19 - 25 and men aged 40 - 45
- Condom use is lowest among older women aged 25 - 49 years (17%) as compared to younger women aged 15 - 24 (32%)
- Condom use among married women is lower (2.6%) than among women who have never been married (32.5%)

Source: MDHS 2000

Promoting female condoms has received less attention and use has been minimal. They are more expensive than male condoms and consequently, have not been readily available. This discourages their use and places women at higher risk of infection, especially for those unable to persuade their partners to use male condoms.

Other factors contributing to limited use include inadequate knowledge, poor attitudes about what constitutes sexual pleasure and the association of condom use with promiscuity and sexually transmitted infections.

Socio-Economic Determinants

Poverty

Generally poverty is thought to increase an individual's susceptibility to HIV infection, particularly in the case of women and young girls. Poverty also limits a nation's capacity to respond adequately to the HIV and AIDS epidemic. According to existing evidence, the socio-economic status of women in Malawi is typically lower than that of men, which places them at greater risk of

infection. Barnett and Whiteside (2002) report that "differential incomes, status and social standing may determine livelihood choices and ultimately sexual networks." Poverty frequently leads women and girls to engage in transactional sex as a source of income and subjects them to sexual trafficking and exploitation. A number of studies in Malawi have found that young girls from poorer families marry at an early age and many women engage in transactional sex to escape poverty (Coombes, 2001).

Because women often depend on men for their livelihood, they may find it difficult to negotiate for safer sex and/or abandon risky relationships altogether. Ultimately these women are exposed to greater risk of infection. Limited education and restricted inheritance rights further accentuate women's poverty. Their access to and control over productive resources is limited (Ngwira, et al, 2002). Women's participation in decision-making processes and socio-economic development is also restricted. Traditional reproductive roles and the responsibility as caregiver to family members inflicted with HIV and AIDS, reduce women's ability to contribute to the wage market. Ironically, while women provide the majority of labour in the agriculture sector, 72% of them do not earn wages (DHS, 2000).

Despite belief that poverty facilitates HIV infection amongst women and limits their opportunity to education, epidemiological data for Malawi suggest the opposite to be true, as shown in Tables 1.4 and 1.5 previously. These conflicting findings require further investigation to explain and understand conclusively the reality of the situation.

Cultural norms regarding multiple partners and promiscuity

Malawian culture inherently promotes ideals of fidelity and mutual faithfulness. However in practice, male promiscuity is condoned and perceived as a symbol of manhood, while for females it is simply not tolerated. Society's double standards

for similar types of behaviour undermine the effectiveness of prevention programmes that centre on discouraging the practice of multiple sexual partners (Gupta, 2000).

Polygamy is commonly practiced in some cultures, particularly in the Northern and Southern regions of Malawi, and evidence supports that one-fifth of married women are in polygamous marriages and are effectively heads of their households (Ngwira, et al, 2002). Polygamy per se does not increase the spread of HIV providing mutual faithfulness exists; however, because women in these marriages are not treated equally and men are not always faithful, the practice does present an increased risk for viral transmission.

Harmful traditional cultural practices

Box 1.4 provides examples of some harmful traditions practiced in Malawi. Most involve unsafe sexual customs, which increase susceptibility to HIV infection and create additional reproductive health complications among women and young girls, particularly during childbirth. Practices of wife inheritance, initiation ceremonies, death cleansing rites and the tradition of offering women to men as “bonus wives”, called “mbiligha”, are common. Initiation ceremonies and mbiligha practices involve older men engaging in sex with young girls. And there are no tests performed to ensure that either party is HIV free. These traditions have

far reaching implications on the sexual behaviour of women, especially the young. They tend to promote multiple sexual partnerships and encourage girls to marry young. Unfortunately, little is known about positive analogous practices that exist which may aid in countering the spread of the virus.

Exposure to foreign cultural values

Globalization is introducing foreign cultural practices, which are transforming Malawi’s traditional norms and values about sex and sexuality. The sexual act is becoming a marketable business pursuit as evidenced by the rise in transactional and commercial sex activities, especially in urban areas. Outside influences, like exposure to sexual and pornographic material via electronic media, have also contributed to increased sexual activity amongst the youth. Pornography is one reason cited why primary and secondary school students engage in sexual pursuits (Kadzamira, et al, 2001).

Gender Determinants of HIV and AIDS

Gender-based norms surrounding sexual behaviour

Girls and women in Malawi are culturally socialized to discount themselves, to glorify males as superior and to assume a submissive role under all circumstances. They are also expected to remain passive and submissive during sexual activity or risk being labelled promiscuous. These gen-

BOX 1.4:- EXAMPLES OF HARMFUL TRADITIONAL PRACTICES

- A study by Oxfam in Mulane district reported that girls were being encouraged to have sex after initiation rites in order to become better wives (Coombes 2001)
- Rituals, such as death cleansing, are performed under the erroneous belief that non-compliance to the rituals would lead to death or some other harmful event to those refusing to participate
- Mbiligha is the practice of offering a young female relative of a dead wife to the surviving husband as a bonus for good behaviour and to care for him and any children left behind
- Wife inheritance is encouraged in societies where it is believed that the children of the deceased are well taken care of by their kinsmen
- Minor forms of male genital mutilation involve elongation of the labia minora to please men
- Dry sex that involves applying herbs and other corrosive substances to the vagina for tighter sexual intercourse
- Cultural ban of sexual intercourse for a period of 6 - 9 months for couples after childbirth promotes the practice of men having extramarital sexual intercourse
- Anecdotal evidence of traditional healers demanding sex from women as part of the concoctions to help childless women to conceive

der norms perpetuate male dominance within sexual relationships. They limit choices for women who have no control over their reproductive system and increase their risk to HIV.

Gender based violence

Gender based violence (GBV) manifests in the form of physical, psychological and sexual abuse from the actions of an intimate partner, acquaintance or stranger. A study by the Gender Equality Support Project (GESP, n.d.) reported that GBV in Malawi occurs at family, community and work place levels. It takes the form of “wife battering, girl child defilement, sexual abuse, rape, sexual harassment, trafficking of women, forced prostitution and violence related to sexual initiation rites”.

In addition to violating human rights, GBV is a public health concern. It increases the risk of HIV infection and creates other sexual and reproductive health problems for women, like unwanted pregnancies, abortions and premature childbirth.

GBV facilitates the transmission of HIV infection in four main ways. Firstly, sexual and physical abuse during childhood can lead to high-risk behaviour during adolescence and adulthood. Studies have shown that “individuals who have been sexually abused are more likely to engage in unprotected sex, have multiple partners, and trade sex for money or drugs”, and are more likely to be HIV positive (Gupta, 2000). Secondly, forced sex can cause abrasions and tears that heighten the efficiency of the HIV infection. Thirdly, a woman who is HIV positive may elect not to disclose her serostatus to her partner for fear of GBV, and thereby place him at greater risk of infection. Finally, fear of GBV may reduce a woman’s ability to negotiate for safer sex.

Cases of child defilement by family members and sexual abuse of girl children by teachers and other older men are also common and on the rise in Malawi. A study on the impact of HIV and AIDS in primary and secondary schools found that male

teachers in rural schools were sexually abusing female students, while older men were the abusers amongst girls in urban schools (Kadzamira, et al, 2001). Chanika (2003) reported on girls sexually abused by male primary teachers in Chiradzulu district. One male teacher had 14 student girlfriends. Some male students were engaging in sex with prostitutes or married women and 69% of teachers in the study had student girlfriends.

Most cases of abuse involving family members go unreported to protect the perpetrator, as do those of sexual abuse by teachers. Normally teachers are not reported to the police or Ministry of Education, Science and Technology but rather cases are resolved privately, making it difficult to take disciplinary action. Not only does this reinforce the behaviour, but also undermines the efforts undertaken toward meeting the MDG of improving literacy levels, particularly amongst girls.

Women’s reproductive health status and differential access to health services

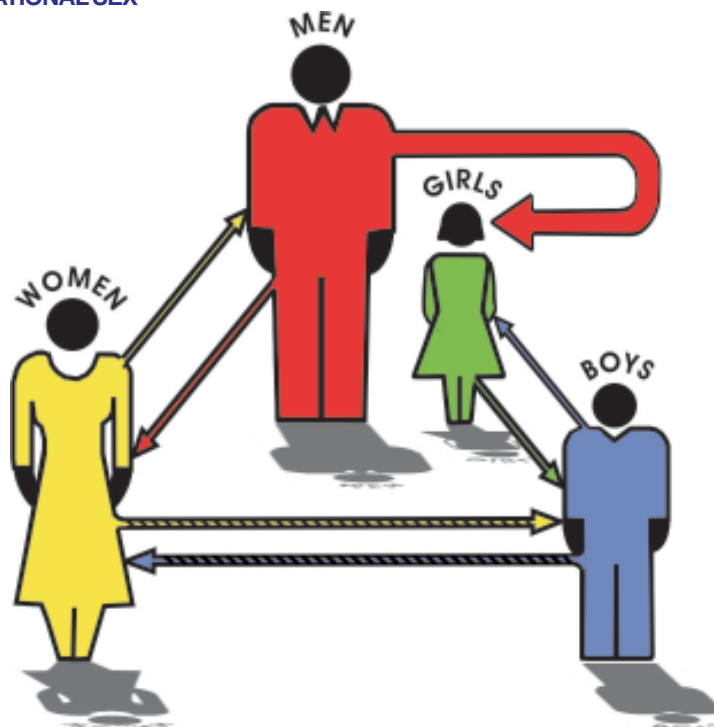
Maternal mortality in Malawi is rated as one of the highest globally with 1,120 deaths per 100,000 live births. Limited access to basic and maternal health care services, and a high incidence of HIV among pregnant women are some of the underlying causes. Meanwhile, reproductive health services in the country have tended to focus more on married women, thereby marginalizing the reproductive health needs of adolescents and men.

Intergenerational, transactional and commercial sex

Intergenerational sex in the country is likely a major conduit of HIV infection from adults to youths, the nation’s “window of hope”. Since research, however, confirming this position has been inadequate, there are no elaborate interventions underway to address the problem.

Figure 1.2 illustrates how HIV is transmitted from older to younger generations. The smaller arrows emphasize the bi-directional and complex nature

FIGURE 1.2:- INTERGENERATIONAL SEX



Source: Adapted from the Botswana Human Development Report for 2001

of intergenerational sexual relationships; it occurs not only between men and girls but also, less commonly, between women and boys.

One reason why some older men have sex with younger girls is because they believe them to be free of the virus. Others wrongly think they will be cured of HIV and AIDS if they have sex with a virgin. These could be some reasons why girl child defilement cases are increasing in Malawi.

Transactional and commercial sex are also on the rise, thriving on unequal power relations and differential economic statuses between males and females in the country. Underlying transactional sex is male dominance and a value system that treats women as sexual objects, disrespecting their bodies, rights and dignity. At the same time, a number of studies show that women often engage in transactional and commercial sex for economic survival. Although few studies have been conducted on transactional and coerced sex in the work place, anecdotal evidence suggest most women participate in sex of this nature to gain favours, such as field trips and promotions.

Intergenerational, transactional and commercial sex work are gender issues that thrive on girls' and women's socio-economic powerlessness. Unless these issues are dealt with from a gender perspective, the spread of HIV will continue to flourish in the Malawian society.

Migration and Mobility

Research in and outside Malawi have shown that migration and mobility increase the risk of HIV infection among itinerant workers and their sexual partners at home. This is because individuals who travel and are away from home for extended periods frequently develop sexual networks and establish temporary sexual partners in different locations. In addition, it is difficult to effectively reach the itinerant with HIV information, education and prevention measures such as condoms.

Malawi categorizes these individuals as migrant labourers, public servants, businessmen, truck drivers and others. The tobacco, tea and sugar industries employ seasonal labourers, which separate many from their families during the growing

and harvesting periods. During these times, many of these workers engage in temporary sexual relationships, which expose them to the virus. They may in turn transmit the virus to their spouses on return home. Proven high prevalence and incidence of STIs and HIV infection among seasonal workers confirm these transitory relationships.

Cross-border trading is also one reason cited for travel. Both women and men travel to countries, such as Tanzania and South Africa, to procure commodities for sale and according to anecdotal evidence, temporary marriages and sexual relationships have been established in these places.

In-country, mobility among civil servants, including police officers and agricultural extension workers travelling away from duty stations, explains the high death toll among these cadres.

CONCLUSION

Chapter 1 explained the extent of the epidemic in Malawi, with a particular emphasis on women and

young girls as the most vulnerable. The determinants aiding the nation's spread of HIV, as in many African countries, are behavioural, economic and socio-cultural. To significantly impact and prevent further spread of the virus, several areas must be addressed. Current responses require additional investigation to assess the extent they focus on underlying socio-economic and gender issues – the core of the epidemic. A transformed, targeted and empowered approach must link HIV prevention and impact mitigation to poverty reduction strategies. For women and young girls, their poverty, limited access to education and lack of participation in decision-making roles should be prioritized and resolved. Cultural practices and gender-based norms, which promote HIV transmission, should be reviewed. Men's attitudes towards women and sexuality need transforming and both male and female condom use require more effective promotion. Young men must be counselled to resist imitating foreign practices if they promote sexual experimentation. Finally, laws dealing with rape, defilement and women's rights to property inheritance need strengthening.

CHAPTER 2

Impact Analysis of the Epidemic

INTRODUCTION

This chapter examines the impacts of HIV and AIDS at both micro and macro levels (BER, 2001). The consequences of the epidemic are assessed according to individual, household, business sector and government and are related to the economic challenges at national level.

HIV AND AIDS AT MICRO LEVEL

Individual

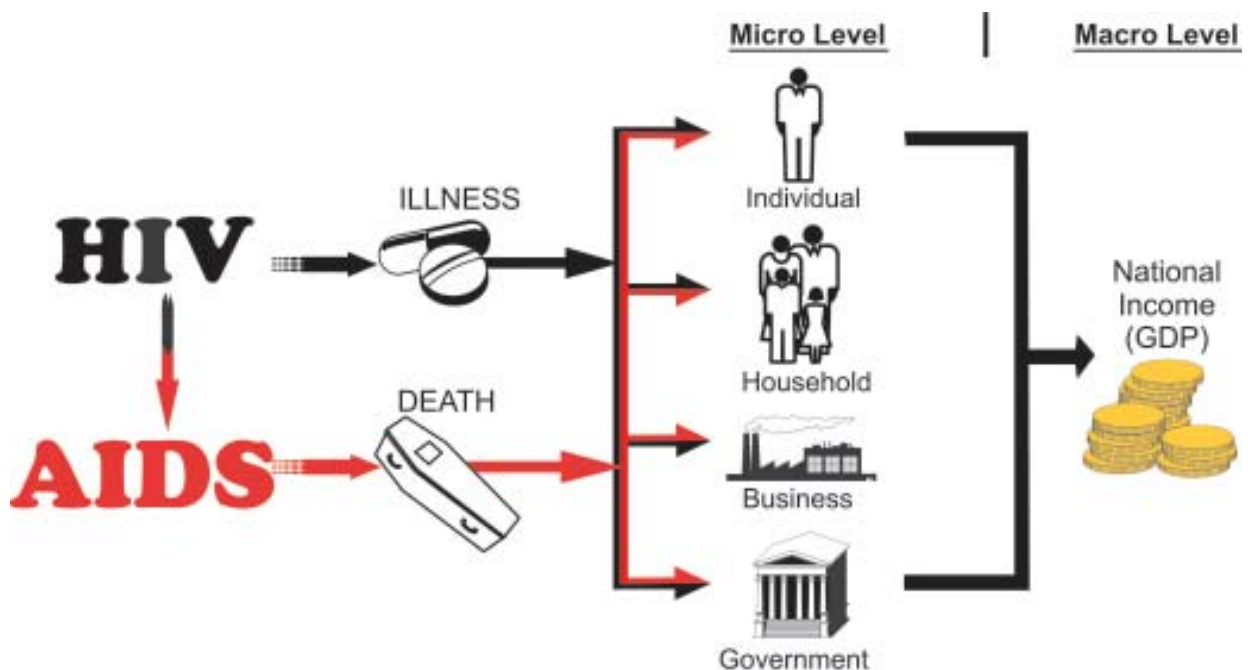
At the individual level, HIV and AIDS tend to strike people during their most economically productive years. Once infected, an individual even-

tually succumbs to illness and absenteeism from work follows, reducing the person's productivity. Individual and family resources are often stretched beyond their limits as expenditures for medical treatments, transport and general care for AIDS patients increase and ability to save is reduced. The potential to diminish a nation's economic growth is therefore underscored in countries with severe epidemics.

Household

Although HIV and AIDS affects all levels of society, some of the most severe effects from the disease occur at household level. Households provide labour to industry and institutions; in turn, a

FIGURE 2.1:- EFFECT CHANNELS OF HIV AND AIDS



portion of corporate income is distributed to the households as salaries. Households use this money to pay income tax, cover living expenses, and any surplus may then contribute to household savings. When HIV and AIDS factor into the equation, consequences can be economically devastating for a family. Household income may reduce dramatically, perhaps permanently, when a breadwinner falls ill or dies from the disease, exacerbating the depth of poverty. Family coping mechanisms are further tested as expenditures increase to meet treatment needs of the sick, which often deplete household savings and result in the liquidation of assets. If one or more members are forced to stop working due to illness or to care for the sick, the family may have no alternative but to seek support from other relatives. Often older parents or guardians undertake this responsibility even though they themselves may be living on limited resources, like an old age pension. This illustrates a reversal in intergenerational dependence.

Business Sector

Business, as with many segments of society, has abided a succession of direct and indirect costs because of the epidemic. As employees and family members affected or infected by the disease become ill or die, companies must contend with the subsequent costs associated with, for example, recruitment and training of new staff, a reduced complement of company skills, absenteeism due to illness, and compassion and funeral leave. To offset the rising costs of health care faced by employees, companies are encouraged, if not expected, to increase contributions to employee pensions, life insurance, disability and medical benefits. Productivity is ultimately reduced because of physical disability, absenteeism, stress, and decreased morale of work colleagues, friends and family – all directly or indirectly caused by the epidemic. Additional costs incurred include legal fees, time spent on negotiations between labour and management and investment in occupational health and safety standards.

Several factors determine a company's vulnerability to HIV and AIDS and include: the labour intensity of business activity; risk profile or susceptibility of its workers to the disease; skill level of affected employees and turnaround time needed to replace lost staff; structure of employee benefit schemes; the degree in which planned strategies have been implemented in the work place; and the effects of AIDS on product suppliers and target markets. The related cost increases will adversely impact corporate savings, and thereby constrain private sector investment opportunities.

Government

One of the most visible consequences of the epidemic is an increase in the number of people seeking medical care. As individuals with AIDS turn to state hospitals for assistance, the financial strain on the public health sector rises. The sheer increase in numbers seeking health care and resultant expenses needed to treat AIDS and AIDS-related illnesses, place a substantial financial strain on the public health sector as compared to other health conditions.

Normally government operates on revenues received from import and export tariffs, income and indirect taxes, and proceeds from net foreign borrowing. Revenue spending include those on goods, services and investments, and any surplus revenue represents government savings. As direct or indirect costs resulting from the epidemic increase, private sector profits reduce and adversely affect economic growth and wage levels as a whole. The loss of private sector profits represents a likely indicator of tax base erosion and decreased government revenue.

A major challenge for government today, therefore, lies with the increased financial burden of higher public health care costs and other social spending, such as institutional care for orphans that will most likely coincide with reduced tax revenues. In all probability, the result will be a shift away from spending in high priority areas to those which

lead to less productivity and downward growth.

HIV AND AIDS AT MACRO LEVEL

At the macro level, HIV and AIDS adversely affects GDP growth in countries with severe epidemics; however, predicting the extent of the effects on economic growth is difficult. Full impact felt from the epidemic will likely be delayed, limiting the ability to predict the economic costs of future growth and the upshot of demographic changes and project costs that assess current consequences. The majority of attempts to quantify the macro-economic effects were made during the early 1990s; in Malawi, this exercise was conducted in 1994 – 1995 (Cuddington and Hancock, 1994; Lohdi, 1995).

Comparative statistics from the region suggest a direct linkage between HIV and AIDS and a reduction in GDP. In his study of 30 countries in sub-Saharan Africa, Over (1992: 23, 25) predicted that GDP growth rate on average would decline by 0.82 percentage points every year. Of the findings from an estimated 30 countries investigated, GDP per capita would decrease by 0.09 percentage points while for the remaining 10 countries with a higher incidence, GDP per capita would decrease by 0.24 percentage points.

Loss of labour productivity and increased medical expenses affects economic growth. Reduced savings, and hence less capital, results in lower economic growth. Considering that capital and labour are factors of production, reduced capital will lead to reduced output. This will in turn affect human development given that: a) per capita income will reduce; and b) it will reduce the ability of the public sector to provide essential services like health, education, water and sanitation. The decline in output growth brings about a decreased demand for imports, and yet imported goods are essential for production. The contraction in imports and hence the revenue from import tariffs, result in further losses in fiscal revenue.

Although the precise measurement of consumption levels is difficult, an indisputable relationship exists between HIV and AIDS and consumption. As the incidence of the illness increases, followed by the probable death of an HIV and AIDS patient, the tendency is for both direct and indirect expenses to increase. These expenses are typically financed through savings and by selling household assets.

AIDS affects the household spending patterns, as infected households will be burdened by higher health care costs, transportation costs to and from health services and funeral expenses. Households may need to divert funds away from savings or other expenditure categories, such as children's education and other non-essential expenditures due to HIV infection and AIDS. Some households may even find it necessary to liquidate fixed assets in order to afford medical care for the sick or to cover burial costs. Furthermore, AIDS deaths will reduce absolute numbers of consumers in an economy, which could have a negative effect on aggregate consumption expenditure.

Government, household, and net foreign savings determine total domestic investment, which is allocated to different sectors according to observed sectoral profit rates, so that more profitable sectors in the economy will attract a greater share of the resources available for investment. Acknowledging that HIV and AIDS reduces savings, presumes that the investment level in the economy also decreases. This will affect output as well as human development as per capita income decreases, assuming that income decreases faster than population.

Some wealthy individuals infected with the virus seek medical services outside Malawi. The terms of trade are adversely affected because of increased imports of goods (medicine and hospital equipment) and services (treatment costs) related to HIV and AIDS. In addition, government resorts to importing greater volumes of medicines in

order to respond to the demands of the scourge. This puts pressure on the little foreign exchange that is available and alters its allocation to services (treatment costs), which are less productive. The combined effect of these two scenarios could lead to a worsening current account balance.

As the supply of labour falls due to HIV and AIDS, the economy experiences increased wages, production costs and domestic prices, leading to deterioration in international competitiveness and fewer exports. The contraction of exports leads to further losses in production, employment and deterioration of fiscal revenues, as export taxes constitute an important source of government revenue. The decline in exports, coupled with the increase in imports, worsens the trade balance.

Effects of HIV and AIDS on Literacy Levels and Human Development

The effect HIV and AIDS has on literacy is determined in part by the degree which the epidemic affects and infects both teachers and pupils. Infected or affected teachers are often absent from work because they are too ill to work, are seeking treatment or must attend to sick relatives. Class lessons are therefore impacted, which may lead to low achievement in education, higher dropout and repetition rates, and hence lower literacy levels.

Similarly, affected or infected pupils absent themselves from classes either because they must care for sick relatives or they themselves must seek medical attention. Pupils caring for sick family members are often anxious, worried, and depressed, hence unable to concentrate in class. As stress levels increase, high dropout and repetition rates may contribute to reduced literacy rates.

Literacy amongst women is also an important indicator in assessing a nation's level of human development. Policies that improve the education of women better women's socio-economic status

and expand their employment opportunities. It is believed that women with higher levels of education are better equipped to negotiate safe sex with their male partners.

Longevity and HIV and AIDS Links

An increase in life expectancy is an indication that human beings are living healthy lives, which reduce their susceptibility to life threatening accidents and disease, including HIV and AIDS. Life expectancy is lower in countries with a high prevalence of HIV infection. For example, in Malawi the 1998 population and housing census indicates that life expectancy is at 42 years. The 2003 National AIDS Commission (NAC) report estimated that life expectancy would have been 56 years had there been no HIV and AIDS to contend with. It currently stands at less than 40 years in light of AIDS.

The Impact of HIV and AIDs in Malawi

HIV and AIDS has become a serious health and development problem in many countries throughout the world. The joint United Nations Programme on AIDS (UNAIDS) estimated that at the close of 2001, the number of people infected with HIV was almost 40 million; about 28 million infected people or 70% of the total were in sub-Saharan Africa. The prevalence of HIV and AIDS amongst adults is approximately 14.4% (NAC, 2003). This pandemic is unique in that it primarily affects the 15 – 49 year olds; the age group regarded as the most productive. This leads to a loss of important talent, skills and productivity, which is reversing many of Malawi's socio-economic gains made in the 40 years since its independence.

As HIV and AIDS spreads and advances, the frequency of illnesses and number of deaths among the population increase, thereby reducing the labour force. Absenteeism and attrition threaten the quality and quantity of public services provided.

The impact of HIV and AIDS on the individual,

household and sectors of social and economic importance will be examined in the remaining sections. Any attempt to perform a systematic analysis of the HIV and AIDS impact is, however, hampered by the concealment of the disease. For example, few individuals know their sero-prevalence status or refuse to divulge it and recorded deaths may not accurately specify the cause if HIV and AIDS-related. Poor record-keeping, especially in public institutions, further compounds the problem. The lack of relevant data from key sectors makes it impossible to conduct any useful cross-impact analysis.

Impact on personal health and well-being

Progression of the disease from the point of infection to full blown AIDS may occur over a period of several years; however, diagnosis alone can prove cause enough for severe emotional trauma. And once the diagnosis is revealed publicly to friends, work colleagues and family, the individual may then be shunned because of associated stigma. As the disease continues to progress, so too does the frequency of opportunistic infections experienced, weakening and rendering the person less productive and more dependent on others, even for such basics as personal hygiene. The inevitable premature death that follows robs the individual of a fulfilling and productive life and eliminates potential contributions to the welfare of family and society as a whole.

Impact on household welfare

The impact of HIV and AIDS on the household is felt as soon as a member begins to suffer from HIV-related illnesses. Long-term illness prevents the individual from working and increases health care costs, while other family members spend time providing care rather than on income earning activities. Increased expenditure on health care at a time when the household is confronted with decreased income results in diminished savings, among other problems. In 2000, the annual cost estimate in caring for an AIDS patient was about MK 50,000 or the equivalent of four years of sal-

ary for the average Malawian wage earner (Panos/UNAIDS, 2000). Assets, such as land, bicycles and houses, are often sold to meet the costs of health care and food. Palamuleni, et al (2003) in their study of people living with HIV and AIDS in Blantyre, Lilongwe and Mzimba found that 42% of sampled families had sold part of their assets due to the prolonged illness of a family member.

The death of an individual leads to permanent loss of income because of either lost wages or remittances, or a decrease in agricultural labour supply. The households then must also bear the additional and substantial costs of funerals and mourning.

As outlined earlier, the 1998 Malawi Integrated Household Survey estimated that about 65% of Malawians lived below the poverty line. The HIV and AIDS factor has increased the proportion of households affected by deepening poverty. This has undermined people's traditional concern with and support for community welfare, as the welfare of one's own family members takes precedence. In the absence of a formal social security system or other safety nets, households, particularly in rural areas, may force some family members to enter the work force, including children.

A nationwide child labour survey carried out in 2003 revealed that poverty was the single most important factor forcing children aged 5 – 17 years into the work force (MLVT and NSO, 2004). And children from HIV and AIDS affected households are more likely to find themselves in this situation than those from non-affected households.

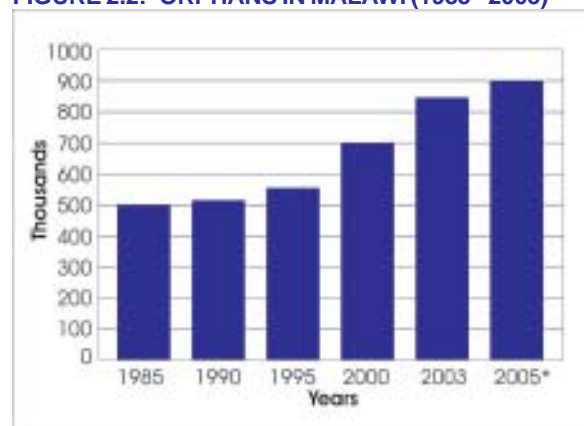
Child labour has detrimental effects on child development. The child does not receive a formal education and thereby misses an opportunity to escape the poverty trap. The destitute child may have little choice but to engage in work detrimental to health, such as spraying chemicals on tea and tobacco estates, or participating in morally questionable activities like prostitution. Without

the advantages and opportunities that an education provides, orphans and other vulnerable children may grow into illiterate and unproductive adults, perpetuating the reduction in productive human capital (World Bank, 2001).

Parental deaths and the orphaned

HIV and AIDS contributes to the high mortality amongst adults of child-rearing age and has fuelled the growth in orphan numbers. The National AIDS Commission (NAC) estimated that about 840,000 children under 18 years were orphans in 2003. Approximately 45% of these children were orphaned due to AIDS-related deaths of one or both parents (NAC, 2003). Figure 2.2 shows the approximate orphan numbers from 1985 – 2005.

FIGURE 2.2:- ORPHANS IN MALAWI (1985 - 2005)



Source: 2003 NAC Report * Estimated Number 2005

Orphans may suffer immense emotional turmoil that is frequently suppressed because societal norms do not encourage free expression. As a consequence, guilt, anger and confusion continue to fester in the child (NEC, 2000). Orphanhood can also affect children differently at various stages of life. For example, studies reveal that a mother's death has greater impact on the children who are under five years than older children in their teenage years; a father's death has a greater effect on the development and educational opportunities for older orphans (MGCS, 2003).

Orphan care

Before HIV and AIDS, orphans were tradition-

ally placed with uncles and aunts still in their productive ages. Today the younger and more productive people form the largest group of those dying of AIDS, leaving the often resource-poor elderly to assume parental responsibilities of the surviving children. But when cared for by relatives, orphans are not always well-treated. Sometimes they are kept under conditions of servitude, forced to engage in farm chores before the school day begins, denied food and subjected to verbal and physical abuse (Kadzandira and Mvula, 2001).

Without proper care and supervision during this critical period of their lives, orphans may easily drift into a life of delinquency or life on the streets. A survey in 2004 (MLVT and NSO) established that 51% of street children had either one or both parents dead, the majority most likely due to AIDS-related illnesses. As these children become alienated from their communities, they may resort to crime, drugs and alcohol abuse. Without any community restraints these children could potentially destabilize society in the future, creating more lawlessness and increase the costs in policing and administering the justice system (World Bank, 2001).

Child-headed households

With the rise in orphan numbers, a new dimension to the family unit has been created – that of child-headed households. These households, often headed by children as young as 10 years, either depend on charity for survival or the child-head may be required to work in order to support younger siblings. In the absence of legitimate cash earning opportunities such children easily drift into illegitimate activities like providing sex to older men in return for cash. Even reputable well-wishers may demand sex or coerce children into early marriages in return for financial assistance (NEC, 2000). Young, inexperienced and desperately in need of cash, the child prostitutes are often unable to negotiate safe sex and therefore run a high risk of becoming infected, often by older clients, and passing the virus on to future partners. They

become new foci for HIV transmission among the youth. The increasing number of orphans and apparent failure of the extended family to cope with their needs because of worsening financial constraints, have led to the proliferation of orphanages and orphan care centres. Not all of these, however, have been set up with noble intentions. There have been cases of embezzlement of donor money intended for orphans. Ironically, the very people intended to protect orphans are the people abusing them. Figure 2.3 shows the many problems children and families affected by HIV and AIDS may experience.

Impact on the Education Sector

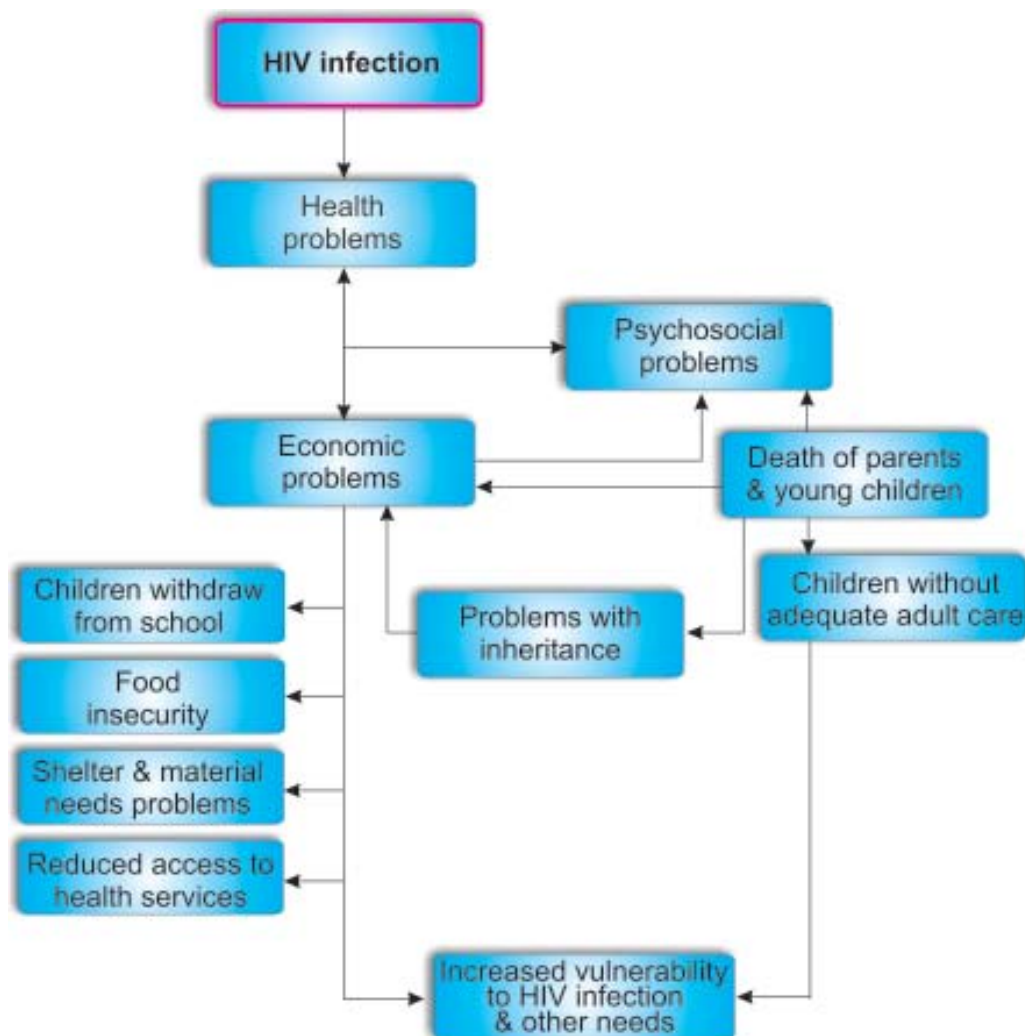
Education is a critical component of human capi-

tal because it influences skills, knowledge and health, which in turn are important determinants of a country's standard of living and development prospects. The epidemic greatly increases the intensity of existing problems in the education system, particularly that of staff shortages that can adversely affect the quality of education.

Absenteeism and reduced call for education

As the epidemic advances, the number of sick children dropping out of school increases. Many of the estimated 70,000 children under 15 years who were living with HIV in 2003, may be too sick to start or continue with school, or may have already died. The death of an income earner often leads

FIGURE 2.3:- PROBLEMS EXPERIENCED BY CHILDREN AND FAMILIES AFFECTED BY HIV AND AIDS



Source: NEC (2000)

to the withdrawal of children even from tuition-free public schools since they often cannot meet the cost of school supplies such as pencils, pens and exercise books (NSO and MACRO, 2003). And many children, especially girls, are withdrawn from school to look after sick relatives, to perform household chores, or to earn an income. In areas most affected by HIV and AIDS, 30% of primary school children were absent from school to provide care for sick relatives (USAID, 2000). Orphans are particularly vulnerable and are likely to dropout because of a number of factors including lack of decent clothes, hunger, and inadequate parental supervision. Consequently, the increasing numbers of children who are not able to attend school or withdraw, reduce the demand for education.

Absenteeism and attrition of teachers

Frequent illness of infected teachers or members of their families leads to high levels of absenteeism. Bennel, et al (2002) found that personal illness and attendance at funeral services each accounted for 35% – 45% of teacher absences from school. Caring for sick relatives, however, was not a major reason for teacher absenteeism.

Death was reported as the major cause of attrition among qualified primary school teachers in the public service between 1997 and 2000 (UNDP, 2002). Estimates indicate that 66% of teacher deaths could be attributed to HIV and AIDS. An absence of teachers may mean that classes are not adequately taught. Healthy teachers are frequently assigned to take on the classes of sick colleagues, but the added workload typically lowers teacher morale in absence of compensatory remuneration. Subjects, such as science and mathematics, may be assigned to teachers who lack the appropriate qualifications and thus course quality is compromised. Consequently, a poor foundation in mathematics and science subjects narrows the pool of eligible candidates for science-based professions such as medicine, agriculture and engineering.

The goals of “Education for All by 2015” set by the World Education Forum in Senegal, and to which Malawi subscribes, are challenged by HIV and AIDS-related attrition and absenteeism among teachers, school managers and pupils. Thus, creation of a skilled work force is also jeopardized.

Impact on the Health Sector

Maintaining a healthy population is an important goal in its own right and is crucial to the creation of a productive work force for economic development. Professionals and skilled workers, including those in the health sector, are among the estimated 80,000 people who die annually of AIDS. HIV and AIDS thus affects both the quality and quantity of labour through illness and death.

The epidemic has contributed to a worsening of health indicators. Maternal mortality for example, has increased from 620 per 100,000 to about 1,120 per 100,000. Life expectancy today is about 42 years, but as earlier stated, should have been 56 years without the presence of HIV and AIDS. An alarming 14 years of life have been lost. The new TB cases in 2003 were estimated at 30,000, but without HIV and AIDS the number of new cases would have been 10,000 (NAC, 2003).

An UNDP (2002) report found that death-related staff attrition was greater than all other causes of attrition in the Ministry of Health. Most of those dying were young adults 30 – 44 years, in-keeping with the broad trends of AIDS-related deaths in the country, according to the National AIDS Commission. These deaths only exacerbate prior high vacancy rates due to government inability to train sufficient numbers of staff and create conditions for their retention. The vacancies increase workloads of existing staff and the quality of service is compromised as some activities are performed by staff not trained for them (Kandzandila and Mvula, 2001). The loss of skilled health care staff undermines health care delivery at the very time it is needed most.

Impact on Agriculture Production and Food Security

Malawi's economy is mainly agro-based. The projected contribution to the GDP figure for 2004 is about 8%, with approximately 9% from small-scale and 3% from large-scale agriculture (MEPD). In spite of its relatively small proportion, small-scale agriculture provides a livelihood for more than 80% of the rural population and has in the past ensured food security. But AIDS has adversely affected the agricultural sector through the loss of labour supply and income. A loss of labour during the crucial periods of planting and harvesting can significantly lower crop production. Additionally, a reduced labour force will likely cause farmers to switch to less labour intensive crops. In many cases this might result in switching from export crops to food crops. Palamuleni, et al, (2003) found that prolonged illness of a family member led to delayed farm operations and abandonment of labour intensive crops in favour of those less labour intensive. For example, tobacco production, which requires large amounts of fertilizer and pesticides as well as labour, may be relinquished. Should many households abandon tobacco growing altogether, the volume of tobacco available on the market would decline and adversely affect foreign exchange earnings. Reduced foreign exchange earnings would ultimately harm the country's ability to import goods that are crucial for improving the quality of life.

HIV and AIDS-related illnesses and deaths in households dependent on agriculture also threaten food security. More time may be spent on caring for the sick, attending funerals and mourning than on food production. A study from the Zomba Rural Development Project in 2003 revealed that HIV and AIDS affected households produced 14.8% less food than non-affected households (Phiri, et al, 2004). Households that used to grow their own food may be forced to buy it to supplement shortfalls or borrow from the extended family. HIV and AIDS may trigger food insecurity on a much wider scale compared to seasonal food shortages.

Phiri, et al (2004) also found that illness associated with absenteeism and shortages of staff increased staff workloads in the agricultural extension service, which in turn reduced the number of extension visits. Instead of the recommended fortnightly visits, 21.1% of small-scale farmers were visited only twice a month and 47.9% received no visits at all during the same period. In the smallholder agriculture sector where alternative sources of technical information are limited, the absence of extension visits deprived farmers of useful information which may have adversely affected production, particularly of new crops.

In 2000, the number of deaths in the Ministry of Agriculture reached an average of 25 per month (Malawi Government/UNDP, 2002). Most of the cases of excessive mortality could be linked to HIV and AIDS despite the absence of a clinical diagnosis for cause of death. The effect of these deaths has been to create vacancies, which are difficult to fill. The situation is similar to that found in the Ministry of Health described earlier.

High death rates in some rural areas have left many gardens uncultivated as those with the property rights have died. In matrilineal Machinga, high mortality among the women has created opportunities for men to acquire the land from the deceased, normally an opportunity not afforded according to custom. This situation may represent the beginning of male encroachment on female land rights in a matrilineal social system. A number of leasehold estates also lay abandoned or partially cultivated as the survivors lacked resources to fully work the land. Such estates are potentially available to new buyers. Since the survivors often must settle any debts incurred during the relative's illness and at the time of death, the land may be sold cheaply (Kishindo, 2003).

Impact on the Business Sector

The business sector is commonly regarded as the engine of economic growth. It is affected by labour days lost due to illness, lowered physical ca-

capacity of infected workers and higher overtime costs for workers obliged to fill in for sick colleagues. Death leads to loss of managerial capacity and technical skills. Direct costs include spending on health care, funerals and death in service benefits. Although little data exists on the effect of HIV and AIDS on business, Jones' (1996) study of Makandi tea and coffee estates illustrate the problem. HIV and AIDS accounted for 3.4% of the estate's gross profits during the 1995 – 1996 fiscal year. Increasing costs may compel businesses to shift much of the burden of the epidemic to society at large by subcontracting or employing labour on short-term contracts (de Waal, 2003).

Small- and medium-scale businesses are particularly vulnerable to HIV and AIDS-related illnesses and deaths. In 2001, such proprietors operated 60% of Malawi's enterprises; of the remaining enterprises, 97% employ one to three people. Premature deaths of entrepreneurs increase loan defaults for small- and medium-scale enterprises. Palamuleni, et al (2003) found that 60% of businesses owned by people living with HIV and AIDS experienced a decline in income because part of the capital was diverted to treatment and other household needs; in some cases business operations were being managed irregularly.

On the other hand, high death rates have triggered a boom in death-related businesses such as coffin workshops, "terrazzo quarrying", tombstone and wreath making. "Terrazo quarrying" is a popular economic activity in parts of Balaka, Ntcheu, Mwanza and Blantyre districts. The major coffin making companies have branches in the cities and major towns, and have among their clients, government departments and statutory companies.

Impact on Governance

The initial societal impact felt from a reduction in life-span is the loss of human resources, including work experience and established networks. While recruitment and training demands to fill vacancies increase, training institutions are unable to produce replacements fast enough due to limited resources. Inefficiencies develop in public institutions as posts are left unfilled and senior employees assume duties of absent subordinates, or inexperienced juniors are promoted rapidly (de Waal, 2003). State institutions are faced with the challenge of maintaining their viability in the context of a rapid staff turnover and shorter working lives. Overall quality of service provision is threatened by institutional decline, as is the capacity to meet the challenges arising from the epidemic.

CONCLUSION

HIV and AIDS has the potential to reverse those gains made in human development in the last few years by curtailing the enjoyment of a long, healthy life and reducing educational opportunities for certain segments of society, which would provide opportunities for a decent standard of living. It also poses a threat to the social fabric as bonds of reciprocity and mutual support collapse under the strain of supporting members of affected households. The very survival of communities is threatened. Given the slow rate of behavioural change, more young people may become infected and die and many infants will become infected through mother-to-child transmission. The nation's challenge is how to ensure those not infected remain so and contribute their fullest potential to national development. People are and will always remain a country's greatest resource.

CHAPTER 3

The National Response Parameters to the HIV and AIDS Epidemic

INTRODUCTION

Malawi's national response to the epidemic has evolved over two decades from the first reported case of AIDS in 1985 to the end of the first strategic framework in October 2004. This chapter of the report examines how Malawi has responded to the challenges posed by the epidemic from a historical perspective in two phases (from 1985 – 1998; 1998 – 2004), analyses key achievements and prospects in an expanding multisector response and highlights gaps that need to be addressed to stop the continued spread of the epidemic. The chapter lays down the basic rationale for Malawi to urgently re-define the parameters of its national response to an epidemic that is not only relentless but dashing all hopes for sustainable human development. While reference is made to several documents defining the course and progress of the response, original arguments are made highlighting critical shortfalls and the need to redefine the focus of response in the subsequent five years.

THE EARLY YEARS: 1985-1997

Medium Term Plans and National AIDS Control Programme

Two overlapping Medium Term Plans (MTP) guided Malawi's initial response to the HIV and AIDS epidemic. The first (MTP I, 1989 – 1993) set out to secure the safety of blood for transfusion, by screening for HIV infection. A national IEC campaign began to inform and educate the public about HIV transmission and its prevention.

A National AIDS Control Programme (NACP) was established in the Ministry of Health to provide technical leadership and coordinate the response. The NACP had regional and district based structures. The second MTP (1994 – 1998) expanded the IEC campaign and blood screening. It established syndrome management of STIs and achieved almost universal knowledge of HIV and AIDS. A sentinel surveillance system was introduced to provide good and reliable epidemiological data. Early efforts to address the impacts of the epidemic, such as orphan care and support, also began during this phase. Research was carried out on the social and cultural determinants of the epidemic.

Shortfalls in the Early Response

The early efforts laid the foundations for the national response but were soon challenged by the complexity and demands of the epidemic. The national response championed through National AIDS Control Programme (NACP) was predominantly bio-medical in design and unable to address the sociological, cultural and economic determinants of HIV and AIDS (World Bank, 1996). Its location in the Ministry of Health curtailed efforts to achieve a truly multisector approach and compromised the evolution of a multi-disciplinary coordinating machine. Although strong at the central level, the NACP was weak at regional and district levels. The structure also hindered recruitment and retention of higher caliber multi-disciplinary personnel, thereby undermining its capacity and authority to tackle challenges

decisively.

While high levels of awareness had been achieved, behaviour change was still too limited to turn around the course of HIV and AIDS. Condom use, risk perception and readiness to be tested for HIV infection were dismally low. Denial was still high and a conspiracy of silence reigned. The voice of key constituencies like politicians and religious leaders was muted by denial and a judgmental attitude towards people living with HIV and AIDS perpetrated in large part by the religious community.

THE MIDDLE YEARS: 1998-2004

National Mobilization and Action Planning

In 1998 – 2000 government collaborated with UNDP to plan and coordinate a nationwide community mobilization, capacity building and strategic planning effort intended to support communities, institutions and organizations to develop the ability to discuss more openly issues of HIV and AIDS and to respond more effectively to its challenges. By “breaking the silence” and stimulating debate, individuals, communities and institutions would cultivate a deeper knowledge and understanding about the nature and impact of HIV and AIDS and therefore become better equipped to offer more effective and sustained responses. This process culminated in the design of Malawi’s first National HIV/AIDS Strategic Framework (NSF) for 2000 – 2004.

The NSF became a strong rallying point for programming and for resource mobilization. The mobilization processes that preceded the NSF and its implementation during 2000 – 2004 created considerable openness, especially among the political elite and religious organizations. The NSF also increased commitment of Malawi’s development partners and donors to combating HIV and AIDS, so that during a Resource Mobilization Round-Table in March 2000, a pledge of over

USD 100 million was made in support of the NSF. For the period 2000 – 2004, the NSF emphasised the following components:

- Developing and supporting robust prevention programs, interventions and activities, and expanding their scope to reduce the incidence of HIV
- Provision of ethically sound high quality voluntary counselling and testing services as a foundation for entry to care and support, and for prevention of transmission of HIV/STI through behavior change
- Developing the capacity and coordination mechanisms among key agents of socialization (the family, the school and faith organizations) in order to bring about change in behaviours that predispose young people to HIV infection
- Bringing about changes in the socio-cultural beliefs, values and practices that predispose people to HIV infection
- Achieving reform in the social, cultural and economic environment of women, men, girls and boys in order to address gender imbalances and reduce the spread and impact of HIV and AIDS
- Bringing about a sense of hope, faith and a spirit of acceptance of the reality of the HIV and AIDS epidemic among all Malawians in order to facilitate prevention and mitigation of its impact
- Strengthening and supporting sustainable capacities for the care of orphans, widows and widowers, particularly at family and community levels
- Developing and providing adequate and high quality care and support services to people living with HIV and AIDS, affected individuals, families and communities
- Developing a framework for standardized high quality communication materials that are sensitive to gender, language and other cultural variations (National HIV/AIDS Strategic Framework, 1999)

Strengthening National Coordination

In order to strengthen leadership and coordination, the National AIDS Commission (NAC) replaced the National AIDS Control Programme (NACP) in July 2001. From the start the Commission had a broad mandate to coordinate, monitor and evaluate all aspects of Malawi's response to the HIV and AIDS epidemic, as well as to mobilize and allocate resources in all sectors to facilitate expansion of the response. In June 2003, NAC completed developing a national monitoring and evaluation system to measure progress in the response at national and local levels.

Achievements and Prospects

Development of effective partnerships and programme coordination

In implementing the NSF, Malawi has adopted “**the three ones**” strategy, which involves developing **one** broad-based strategic planning framework for all stakeholders; **one** functional national authority to provide leadership and coordination; and **one** national monitoring and evaluation system to collect data and to guide all efforts in measuring the progress and impact of interventions. The principle of “three ones” has now become the cornerstone for coordinating national HIV and AIDS responses and it is well supported by donors and development partners globally.

Many development partners have identified the HIV and AIDS epidemic as a priority for support. A “progressive partnership” has evolved

between NAC and bilateral and multilateral development partners. An HIV and AIDS Technical Working Group (TWG) set up under NACP was broadened by NAC and became the linchpin for monitoring progress in the response. The coordination role of the Commission was further strengthened in August 2002 by relocating it to the Office of the President and Cabinet. This gave NAC greater visibility. The NAC Trust Deed was revised and a process initiated with government for an Act of Parliament to strengthen the legal status and mandate of the Commission.

Mobilization of financial and technical resources

Partnerships, openness about the epidemic and collective planning for HIV and AIDS responses facilitated mobilization of considerable financial resources and increased government commitment. A breakdown of the available funding is shown in Table 3.1. The allocation of the funds by programme component is in Table 3.2. Funds provided directly through international NGOs, the faith community, discrete bilateral organizations and others are not included.

Institutionalization of mechanisms for distribution of financial resources

To support the numerous organizations responding to the epidemic, NAC, partners and stakeholders facilitated the formation of a grants facility designed to increase people's access to HIV and AIDS services, increase and diversify organizations providing services and build the capacity of

TABLE 3.1:- STRATEGIC MANAGEMENT PLAN (SMP) - FUNDING DETAIL BY DONOR (2003-2009) (USD '000)

Component	Global Fund	UNDP	ADB	CDC	Total Earmarked	*Total Pooled	Total SMP	% SMP
Prevention & Advocacy	15,729.8	0.0		750.0	16,479.8	30,000.0	46,479.8	16.9
Treatment, Care & Support	142,901.7	0.0			142,901.7	2,000.0	144,901.7	52.7
Impact Mitigation	1,400.0	839.0			2,239.0	10,000.0	12,239.0	4.5
Sectoral HIV/AIDS	0.0	771.0			771.0	8,200.0	8,971.0	3.3
Capacity Building & Partnerships	22,383.5	325.0			22,710.5	7,000.0	29,710.5	10.8
M&E and Research	2,790.5	0.0		800.0	3,590.5	6,000.0	9,590.5	3.5
National Leadership & Coord'n	10,931.0	1,865.0	600.0	450.0	13,846.0	9,000.0	22,846.0	8.3
Total	196,136.5	3,800.0	600.0	2,000.0	202,538.5	72,200.0	274,738.5	100.0

*Pooled Contributions: CIDA=USD10m; NORAD/SIDA=USD10m; WB=USD35m; DFID=GBP4.5m (USD7.2m); GOM=USD10m (Ref.** WB, 2003)

TABLE 3.2:- EXPANDED HIV AND AIDS PROGRAMME FUNDING (NON-NAC+SMP) (USD '000)

Component	EU	USAID	Other USD	CDC	UNICEF	UNFPA	Total Non-NAC	*Exp'd Funding	% Exp'd
Prevention & Advocacy	7,800.0	18,200.0		2,025.0	5,555.0		33,580.0	80,059.8	24.2
Treatment, Care & Support		3,500.0					3,500.0	148,401.7	44.8
Impact Mitigation		3,000.0			1,650.0		4,650.0	15,489.0	4.7
Sectoral HIV/AIDS		1,500.0	1,500.0				3,000.0	11,971.0	3.6
Capacity Building & Partnerships		14,000.0	1,400.0	2,275.0			17,675.0	47,385.5	14.3
M&E and Research		2,000.0	3,000.0	400.0			5,400.0	14,990.5	4.5
National Leadership & Coord'n		700.0					700.0	12,670.8	3.8
Total	7,800.0	42,900.0	5,900.0	4,700.0	7,025.0		68,505.0	330,968.3	100.0

(Ref. WB, 2003) *Exp'd=Expanded **WB=World Bank

all sectors. A Financial Management Agency (FMA) was hired in February 2004 to manage the grants portfolio. At the same time, the Commission recruited five “Umbrella Organizations” to work at district and local community levels, focusing on:

- Support to districts in order to accelerate the response at that level
- Mobilizing community organizations, faith-based organizations, local non-governmental organizations and the districts to access grants
- Support to both civil society organizations and District AIDS Coordinating Committees in capacity development
- Disbursing grants to district agencies and accounting for grants on Commission’s behalf
- Monitoring implementation of program operations of sub-grantees and reporting progress

By April 2004 when the FMA had mobilized, the Commission had approved MK 270 million in grants of which MK 170 million was paid to over 170 sub-grantees across all sectors. By the end of December 2004, the Commission had committed MK 2.84 billion to approved programmes and had disbursed MK 866 million.

Expansion of a multi-level and multi-sector response

A key measure of the response to this point has

been the number of organizations addressing HIV an AIDS and the participation of community-based organizations, civil society and the formal sectors. A National Association of People Living with HIV and AIDS (NAPHAM) came into being in 1993 to promote positive living and now with over 3,500 members NAPHAM provides AIDS education, distributes and conducts condom education sessions, and offers home-based care and support. In recent years, NAPHAM increased its role in impact mitigation through mobilization and distribution of food among members and orphaned children.

Community organizations created the Malawi Network of AIDS Service Organizations (MANASO) in 1996 to support capacity development of small community groups and to facilitate networking and information sharing. A year later in 1997, Malawi Network of People Living with HIV and AIDS (MANET+) was formed to provide a networking forum for AIDS support organizations and to undertake advocacy for protection of the rights of people living with HIV and AIDS. Counselling and HIV testing centers set up in Lilongwe (1992) and Blantyre (1994) culminated in the formation of Malawi AIDS Counselling and Resource Organization (MACRO) in 1995, which today is the largest stand-alone provider of HIV counselling and testing services present in the three regions of the country.

At local level the response has expanded rapidly by involving community-based organizations (CBOs) now numbering 250 – 300 in addition to over 200 non-governmental organizations (NGOs) offering some form of HIV and AIDS services. In July 2002, National Youth Council had registered 135 Youth Clubs and 81 youth NGOs, the majority of which addressed HIV and AIDS and broader reproductive health challenges among young people. At the same time, HIV and AIDS has become an integral part of pre-service and in-service pastoral training in many faith organizations. An Inter-Faith HIV/AIDS Association was formed in October 2003 to coordinate faith community AIDS action and to support capacity building for agencies involved in implementation. And in 2004 a high level council of the major faiths was formed to provide policy guidance and leadership to the faith-based responses. Combined, civil society, NGOs and small CBOs provide the bulk of community level action in HIV prevention, behavior change communication, gender education, care of orphans, AIDS patients and impact mitigation interventions.

In recent years the public and private sectors have been effectively drawn into the response through the designation and formation of coordinating agencies. The Department of Human Resource

Management and Development (DHRMD) spearheads public sector planning integration of HIV and AIDS guided by a National Public Service HIV/AIDS Policy. At the end of 2004, 15 large sectors (including agriculture, defense, community services, education, home affairs, health and local government) had full time AIDS Coordinators and all 28 districts had recruited and posted full-time District AIDS Coordinators. The Ministry of Health has re-established an HIV/AIDS Unit to coordinate planning and execution of HIV and AIDS activities across its departments. In addition, a health sector framework that includes all stakeholders in health (Government, Health NGOs, Christian Health Association of Malawi and private hospitals and clinics) was developed, under the coordination of the Ministry of Health. The Malawi Business Coalition Against AIDS came into being in 2003 and had already grown to a membership of 35 companies by the end of 2004. With advocacy, an increasing number of private sector companies are identifying HIV and AIDS action as one principal strategy to sustain growth of the sector and prevent the collapse of certain enterprises. Box 3.1 summarizes the institutional coordination framework.

Creating a favourable policy environment

Recently, Malawi has developed a clear national

BOX 3.1:- SECTOR COORDINATION FRAMEWORK

Key sectors responding to the epidemic have been organized into constituencies, each with an umbrella body identified to facilitate coordination.

Public Sector: The sector responds through the leadership of the Department of Human Resource Management and Development (DHRMD), which coordinates sector planning and monitors implementation. A Taskforce of Principal Secretaries, chaired by the Secretary to the President and Cabinet, oversees the overall sector response.

Private Sector: The Malawi Business Coalition on HIV/AIDS (MBCA) was formed in June 2003 to coordinate the response of the sector, and eventually serve as an umbrella organization providing grants and technical guidance to companies.

Faith Sector: The sector formed an HIV/AIDS Inter-faith HIV/AIDS Association to provide technical support, coordination and leadership. Membership includes: Moslem Association of Malawi; Quadria Moslem Association; Evangelical Association of Malawi; Episcopal Conference of Malawi; Malawi Council of Churches; Association of Christian Educators in Malawi; and the Christian Hospitals Association of Malawi.

Civil Society Sector: This sector has been the most active in the HIV/AIDS response at grassroots level. Five umbrella organizations (PLAN International; Save the Children USA/World Vision International; Action Aid Malawi and C-PAR) are working with community and faith-based organizations, local non-governmental organizations and district level HIV/AIDS structures in capacity development, disbursement of funds and monitoring of interventions and resources. This approach has greatly accelerated the flow of funds to local levels and should facilitate expansion of the response at grassroots level.

policy for HIV and AIDS, which has accelerated action at all levels. Linkages have been established with related social programs; notably the Health Plan, the Population Plan, the National Plan for Orphans and other Vulnerable Children, the National Youth Policy, among others. These support and compliment the National AIDS Action Framework. The National HIV/AIDS Policy, launched in February 2004, calls for action beyond business as usual and commits government to stronger leadership of the response. This innovative and home-grown policy incorporates the most current international policy principles and provides the administrative and legal framework for all programmes and interventions “to reduce infections and vulnerability, to improve provision of treatment, care and support for people living with HIV and AIDS and to mitigate the socio-economic impacts of the epidemic”.

National Response Successes

Increased general knowledge and awareness

It is difficult to analyse what impact the national response has had in the absence of solid research. However, the major net effect of all efforts between 2000 and 2004 has been increased multimedia HIV and AIDS communication and awareness. According to the Demographic and Health Survey (DHS) 2000, general awareness has been near universal (99%) with virtually all adults reporting having heard of HIV and AIDS. The majority of the people of Malawi know the major ways to prevent infection through avoiding sex (72%) and use of condoms (63%) while 88% know that “a healthy-looking person could have HIV”, up by 8% from the 1996 survey.

Knowledge and understanding of HIV and AIDS among young people is showing increasing depth. The DHS notes that 67% of young people reported abstinence as one key way to avoid infection. In a survey of 2,780 school children (59% aged 10 – 14 yrs and 31% aged 15 – 21 yrs),

Brueton (2003) found that 87% had heard of HIV and AIDS; 84% correctly stated that unprotected sex was the dominant mode of HIV transmission; 80% of the surveyed children stated that HIV could be avoided by abstaining, while 77% knew that “abstinence” was related to “not having sex”. Perhaps as a result of the increased understanding, the DHS survey also recorded an increase in age at first marriage to a median of 18 for women and 23 for men.

A separate study by Johns Hopkins Center for Communication Programs (Bose, 2004) showed that while HIV and AIDS knowledge was generally high, substantial variations existed between adolescent boys and girls and between men and women. Based on 13 measures of HIV and AIDS knowledge, an average score of 63.1% (SD=22.6) was obtained, with adolescent boys scoring highest (M=70%), adolescent girls and women scoring lowest (M=60% each) and men scoring in between these two groups (M=66%). In terms of efficacy to prevent HIV, 30% females and 19% males said they could negotiate with their partners to use condoms. At the same time 73% husbands and 66% wives stated they could certainly stay faithful to their spouses. Generally, males believed more strongly than females that using condoms during each sexual episode would protect them from HIV and that talking about condoms would result in agreement about use.

Increased knowledge and use of condoms

Condom use has been very difficult to estimate with real accuracy, but it is now clear that attitude and acceptance of male condoms have improved greatly. Findings from the DHS survey revealed that up to 80% of adults expressed that “condoms are safe to use”. In 2000 the rate of condom use was estimated at 34%, up by 15% from a similar estimation made in 1996. The majority of users (20.5%) are young adolescents 15 – 19 years of age. In the survey of 2,780 pupils by Brueton quoted earlier, 81% pupils reached by the study reported that “condoms could prevent HIV”. Over

half (54%) reported having received condom education and another 58% said they needed condom education. However, only 34% female pupils who reported engaging in transactional sex used condoms.

While supply of condoms has continued to grow (about 19 million in-country, NAC, 2003), distribution is often curtailed by logistical bottlenecks and actual use is affected by low confidence and a pervasive conservative culture. It remains a concern that over 40% of women and 20% men report being unable to obtain a condom when wanted.

Growing Access to Critical Bio-Medical Services

Voluntary counselling and testing (VCT)

The requirement for HIV testing services has increased considerably over the past five years. Yet, while estimated service demand cited by the DHS 2000 was 84%, this appeared only to indicate “expected ideal action” rather than “likelihood to seek VCT”. MACRO estimates that in 1994 only about 60 people took an HIV test, but the demand increased exponentially to over 280,000 by 2004 (GoM, 2005). Nationwide, there is approximately 118 facilities offering VCT services and according to the DHS initial data in 2004, 283,467 persons tested for HIV. This total included 62,396 blood donors (22%), 43,345 pregnant women tested for the prevention of mother-to-child transmission of HIV (15%) and 177,726 clients and patients (63%). Twenty-eight percent of testing conducted in connection with blood donation is not reflected as part of the VCT figure as clients rejected were not advised why.

Test results yielded HIV prevalence rates in 13% of the blood donors, 14% of the antenatal women and 28% of the clients and patients. Of the 177,726 clients and patients tested, 48,527 were tested in three MACRO sites where the proportion of persons HIV positive was 14.5%.

In reality, this growth is still too slow and too low given the current HIV prevalence. According to the DHS 2004 preliminary data, only about 11% Malawian adults (7% women) “ever” tested for and knew their HIV serostatus; just 5.6% (3.6% women) tested and received results in the last 12 months.

Trends reported by MACRO show most VCT clients are those aged 15 – 30 years. More males than females of the same age patronize these services. In a utilization study of standalone VCT services, Banda (2003) reported that 91.6% of boys and 85.2% of girls who accessed HIV testing services did so for fear of infection from participating in recent risky sex. In its annual report for 2002 – 2003, MACRO (2003) also notes the most important reason for clients seeking HIV testing services was “client had risk behaviour” followed by “planning for the future”.

In order to increase availability of VCT services, the Ministry of Health has developed a VCT Roll Out Plan and initiated a training programme for counsellors and laboratory staff. VCT services guidelines allow the use of whole blood rapid testing for HIV by non-laboratory health staff.

Prevention of mother-to-child transmission of HIV

Malawi is progressing well in preventing mother-to-child-transmission of HIV. A 2003 review showed that nine sites provided “comprehensive” services while seven provided “partial” services. Uptake of services was high. According to data from these sites, 8,571 of 12,807 (66%) of new ANC attendees received counselling; 98% of those counselled accepted testing and the majority (88%) received their results. The UNC Project at Kamuzu Central Hospital reports rapid growth in acceptance rate from 48% (5,672/11,817) during the first 15 months of activities to 96% in the subsequent nine months (11,719/12,211); a 72% growth over 24 months. The study also reported that of the 24,028 clients who accepted VCT, all

but five took the test; 93% of 2,881 positives women received their results. The outcome of this intervention has been a 40% reduction in HIV transmission at six weeks, from 35% estimated in 2003 down to 21%.

Current PMTCT coverage is still a meagre 0.9% for eligible women or 3% for pregnant women. Human resource and equipment shortages and poor infrastructure are challenges needing quick resolve if coverage and quality of services are to improve.

Expanding provision of antiretroviral therapy (ART)

The establishment of an HIV/AIDS Unit in the Ministry of Health and availability of resources have made the provision of ART an attainable ideal for Malawians. However, as of 2004 limited progress had been made. Only 7,000 (less than 2%) of the potential 150,000 – 200,000 people requiring ART were actually on treatment. At the same time, evidence shows the programme is hampered by high loss before follow up activities. A study conducted at Queen Elizabeth Central Hospital (Joep, J.G., et al) revealed that “more than half the patients who started antiretroviral therapy since 2000 were lost to follow up” and that non-adherence, or even dropout, was associated with shortage of drugs and cost. A similar study at the Lighthouse Clinic of Kamuzu Central Hospital identified early mortality as a leading cause of loss to follow up. Out of 179 patients enrolled between January and June 2003, 45% died; 62% of them either prior to initiating therapy or within three months of commencement of treatment. The situation is however improving. In the same clinic, a review of 3,724 visits by 753 patients during July – December 2003 recorded an adherence rate of $\geq 95\%$ over the past month and that 72% of the patients were back to work or to their previous daily activities (Neuman, F., et al).

Malawi has an ambitious plan to provide ART to 36,000 AIDS patients by the end of 2004 and

up to 80,000 by December 2005. This massive scale up of ARV treatment within the broader framework of the “3 by 5” initiative managed by World Health Organization (WHO) has been boosted by the Global Fund allocation of USD 125 million for ART and treatment of opportunistic infections.

Community Home-Based Care (CHBC)

Malawi has always promoted home care of HIV and AIDS patients to help decongest hospitals. The result has been a dramatic increase in the community home-based care and support group numbers, 75% of them supported by or affiliated to faith-based organizations (NAC 2003). Similarly, there has been an increase in number of trained care providers, the majority working as volunteers. A national training curriculum and a cadre of trainers have emerged and a care kit developed in an attempt to standardize services. In districts offering ART, CHBC programmes have become a critical link for follow up support and, along with VCT, could become the backbone for ART on the DOT model. Meanwhile, the Ministry of Health is pilot-testing an Integrated Community Care Model in three districts (Mzimba, Salima, Thyolo) based on experiences in Natal, South Africa. Family Health International (FHI) is supporting six districts (Nsanje, Dowa, Lilongwe, Blantyre, Chikwawa and Mangochi) to develop an integrated care model for HBC-OVC focusing on impact mitigation (Kaseje, M. et al, 2004).

Safe blood and universal precautions

Malawi has achieved 100% HIV screening for all transfused blood. Recently, these efforts were consolidated through development of policies for blood safety framework (2000), physical assets management (2003), infection prevention and control (2002), and waste management (2004). The national blood transfusion service (MBTS) was set up in 2002 to ensure adequate safe blood nationwide. The challenge now is for the ministry to disseminate these policies and guidelines and monitor adherence throughout the health sector.

CONCLUSION

National response has evolved significantly over the past 20 years since the introduction of HIV and AIDS. Lessons learned from earlier interventions have contributed to developing a more coordinated and multifaceted response. Greater leadership and commitment to the fight against HIV and AIDS is evident as a result of the implementation of a National Strategic Framework and adoption of “the three ones”. Numerous partnerships have also been launched amongst all sectors of society creating greater impact through im-

proved programming and coordination of activity. Significant financial and technical resources have been mobilized to support the programmes implemented by various local and international partners and the introduction of a clear national policy for HIV and AIDS has accelerated action at all levels. The result of all these interventions has been increased knowledge and awareness about HIV and AIDS and improved access to services and support. Still, stronger leadership and greater response coordination is required to meet current demands for assistance, such as those for ARV therapy and voluntary counselling and testing.

Policy Recommendations for Focusing the National Response Parameters

INTRODUCTION

The final chapter examines the deficiencies in the national response and puts forward recommendations to help redirect parameters with the view to accelerate and influence a greater impact on mitigating the effects of HIV and AIDS.

MAJOR GAPS IN THE NATIONAL RESPONSE

HIV and AIDS and National Development Policy Framework

The consequences of HIV and AIDS on the economy, socio-cultural fabric and capacity of the political system to effectively operate are devastating. Still, Malawi has not emphatically declared HIV and AIDS as a catastrophic development crisis that must be addressed in all development planning instruments. HIV and AIDS has yet to be strategically integrated in the Poverty Reduction Strategy Paper (PRSP), the centrepiece of national development planning. The disconnection between the AIDS Action Framework and the Poverty Reduction Framework is reflected in a similar division between sector planning and AIDS Action. At the same time, no clear strategies exist to guide development of human resources essential for a robust response and to sustain productivity and development. Malawi fundamentally cannot hope to reverse the deepening poverty without prioritizing HIV and AIDS and the structural issues of gender at the centre of development and human resources planning. For Malawi it is no

longer an issue of integration or mainstreaming but rather of HIV and AIDS and gender informing development policy.

“Systemic National Response” Evolution

Advocacy efforts of recent years have successfully garnered support from a number of organisations in the fight against HIV and AIDS; however, response is for the most part irregular and disorganised. To boost the effect of response, a systematic, multifaceted campaign galvanized at community level and based on local priorities and plans is fundamental. A genuinely decentralized response generated at district or sub-district level has been contained because of concerns with financial management quality, procurement procedures, monitoring systems and leadership in the district assemblies. Since the majority of donors, however, resisted investing in development projects at district level and in providing district managed funds for HIV and AIDS interventions, only limited resources have trickled down to districts and communities during the past two decades.

Leadership and Coordination Capacity

Implementing the first National Strategic Framework was severely constrained by weak coordination and performance capacity at all levels of response. The National AIDS Commission remains a viable institution but needs a strengthened multisector mandate and formally defined sector roles, especially in relation to the health sector and

donors. Still, substantial progress has been made in establishing systems, policies and procedures. Donor partnerships have agreed on critical issues and progress has been made in a pragmatic and collective manner; however, the approach also delayed the Commission's ability to develop its own identity and take full leadership of the response.

Health Sector Leadership in the Response

The success of Malawi's National AIDS Action Framework depends largely on the Ministry of Health's capacity to champion the bio-medical component of the response. However, the ministry-based National AIDS Control Program was abolished in July 2002 and the ministry is now characterized by weak management systems, rapidly diminishing numbers and quality of human resources, a limited skills mix amongst the available staff and low staff morale due to a host of human resource management issues. Statistics on health personnel demonstrate how constrained human resources for health are in Malawi. Individuals in the health sector have responded to the epidemic by seeking more attractive opportunities outside the sector and abroad, adding to the already significant attrition numbers due to illness and death.

Focus on most "At Risk Groups"

Research and global experiences demonstrate beyond contention that children (0 – 14 yrs), young people (15 – 24 yrs) and women (15 – 49 yrs) are the most vulnerable groups at risk of infection and its impacts and to abuse and violation of their rights and freedoms. Epidemiological evidence indicates that most new HIV/STI infections are occurring in young people. However, the real threat for children, young people and women is not reflected or adequately addressed in the programme designs, the definition of priority target groups and the allocation of resources. Organizations focusing on youth and women (the majority of which are run by youth and women themselves) lack sufficient technical and management abilities to deal with the complex challenges that

these groups face in the wake of HIV and AIDS. In Malawi, action is urgently needed in response to the growing crisis amongst the nation's children, who represent the true hope for creating and protecting a "HIV-free generation".

Integration of Gender in Strategic Frameworks

Globally, as well as regionally, women run the highest risk of infection and suffer the brunt of the disease at individual, household and community levels. Male domination and the culturally imposed submission of females, coupled with deepening poverty, increase the risk of infection among women. Culturally, matters of reproduction, child-care and caring for the sick fall disproportionately on women as compared to men.

Gender issues, however, also should center on the role male attitudes play in the spread of HIV and AIDS. The "macho" mind-set of men bears considerable responsibility for the spread of the epidemic to date, encouraging a display of "masculinity" and sexual prowess. Helen Jackson's (2002) recent publication asserts that "the global AIDS epidemic is driven by men. Men have greater opportunity to contract and transmit HIV; usually determine the circumstances of intercourse; and men often refuse to protect themselves and their partners". Although these assertions are commonly recognized, they have not been strategically incorporated into HIV and AIDS programmes. Consequently, few services, information and financial resources are dedicated to addressing these issues.

Access to and Quality of Critical Bio-Medical Services

Malawi lags behind other nations in terms of essential bio-medical services available. These services are important in supporting both prevention and care programmes, specifically HIV testing, prevention of mother-to-child transmission (PMTCT) and antiretroviral therapy (ART). The present services that are offered provide inad-

equate coverage and are of poor quality. The DHS 2004 reported the rate of growth remains still too slow and low, with only about 11% Malawian adults having ever been tested and aware of their status in the prior 12 months. PMTCT programmes were able to reach only 3% of the proven demand. The current scale of access to essential services is negligible and too insignificant to reduce the rate of transmission or improve the health of people living with HIV and AIDS.

Although community home-based care programmes show substantial promise, they are at present poorly structured nationally. Set guidelines outlining a standard design and implementation and operation instructions of such a programme are essential. Bio-medical components of the national response (CHBC, VCT, PMTCT, ART) have evolved independently of one another and are not methodically linked into one national programme that places the patient on a true continuum of care. A survey of community home-based care systems concluded that home care services are generally poor and are characterized by inadequate drugs and supplies, an absence of nutritional guidelines, and poor nurturing care services for orphans and other vulnerable children. At the same time, monitoring, supervision and the interface with formal health care systems are weak. Care providers do not possess the requisite knowledge and skills, nor do they always receive the recognition and incentives needed to perform, which lead to high dropout rates amongst those who are volunteers (NAC 2003).

Inaccurate and Untargeted Communication Materials

HIV and AIDS-related communication has improved and as a result, awareness is high. However, communication does not always address the needs of communities and sometimes contains culturally inappropriate materials. The needs and conditions of special groups such as young people, especially girls, and women of reproductive age are not dealt with accurately. Print materials,

and recently radio and television, are unsuitable for illiterate communities and those without access to these types of media. Very little time and resources are committed to the more interactive, face-to-face approaches, which have far greater potential for values clarification and for correction of misconceptions, mysticism, fatalism and despair that have long been associated with HIV and AIDS.

Limited Attention to High Impact Issues and Interventions

Condom use is still too low to seriously impact infection levels, particularly among young people. Fears, phobias and misconceptions about condoms still abound as a direct result of inadequate or inaccurate information. Ambivalence and animosity continue to shroud the potential complementary effects of abstinence and condom use due to a moralistic HIV and AIDS model perpetrated by faith-based organizations. Concentrating on the education of issues related to abstinence and mutual faithfulness among partners is not commensurate in the least with the gravity and scale of the epidemic. Even more serious is the failure of the national response to address the challenge of intergenerational sex, which continues to place girls at high risk of infection. National response has strayed from the cultural approach charted out in the National Strategic Framework and so the critical norms, beliefs and values that characterize one's sexual behaviour are not addressed sufficiently to achieve permanent behaviour change.

The incidence level of the epidemic in Malawi and its associated impacts signify the country is on the verge of losing the human development gains made in previous decades, prior to the onset of HIV infection. The large numbers of untimely deaths of trained manpower in the public sector, which also affect the private sector, have caused the deterioration of essential services offered to Malawians. The recurrent deaths among women of child bearing age have left scores of children orphaned, thereby increasing the dependency ra-

tio and deepening poverty.

Although knowledge about HIV infection and AIDS is almost universal, it has not been translated into sustainable, appropriate behaviour change. A culture of silence, denial, despair, stigma and risk of discrimination exists, preventing many people from inquiring as to their HIV status and receiving referral information about HIV and AIDS management services, such as voluntary counselling and testing (VCT), antiretroviral drugs (ARVs) and prevention of mother-to-child transmission of HIV (PMTCT).

The National Strategic Framework (NSF) 2000 – 2004 provided an instrument for multi-sectoral involvement in a national response that had largely been borne by the health sector and which over-emphasized the bio-medical aspects. Financial resources for addressing the spread of HIV infection and AIDS impact mitigation were boosted by the Resource Mobilisation Round-Table Conference stated earlier, which pledged close to USD 100 million. The financial resources grew further through funding from the Global Fund for HIV and AIDS, Malaria and Tuberculosis. The National AIDS Control Programme was replaced by a National AIDS Commission in order to improve coordination and monitoring of the renewed national response. A National HIV/AIDS Policy has since been put in place to guide all stakeholders on key issues related to HIV and AIDS.

As noted earlier, HIV and AIDS has, as yet, not been acknowledged as an emergency in Malawi. For the most part, both public and private sectors are failing to tackle the epidemic with the urgency it demands. There is no significant mainstreaming of HIV and AIDS in core businesses of government ministries and most commercial organizations, despite the appointment of DHRMD and BCAAM to coordinate public and private sector responses, respectively.

The death of many trained professionals and skilled

workers has greatly reduced the human resource capacity needed to respond to the epidemic. As a result, planned intervention programmes, especially those of the public sector, are lagging behind their expected level of implementation. The scaling up of ARV therapy, VCT and PMTCT services are examples of bio-medical interventions expected to be spearheaded by the Ministry of Health and which are behind schedule. A shortage of manpower is the main explanation, plus high attrition is not offset by an increase in training and strategies that improve staff retention. These comments equally apply to the agriculture and education sectors.

Poverty is widespread, especially amongst women and young girls. Proposals for poverty reduction articulated in the PRSP have not yet had any apparent significant impact, especially among the rural poor where the rates of new infections are on the rise. For women, the issues of poverty are worsened by gender inequality in the home, and that affects access to jobs and high decision-making positions. Young girls' access to education is less than that of boys' of the same age and they are also more likely to dropout of school. Young girls form the largest pool of new HIV infections.

Among the factors fuelling the HIV and AIDS epidemic are well-documented cultural and traditional practices such as wife inheritance, mbiligha and sexual death cleansing. They explain the sharp rise in infection rates in rural districts, such as Nsanje and Nkhata Bay. These practices need serious attention that as yet, has not occurred. Recommendations put forward have included collaborating with traditional authorities, who are the custodians of cultural and traditional practices, to modify or ban the rituals altogether.

The current response is still, by and large, centrally driven. Attempts to decentralize to local CBOs, NGOs and city assemblies are faltering due to lengthy procedures, including those for funding these organizations. Capacity building,

technical support and adequate supervision are genuinely needed at this level.

The information given to the community by different interest groups is often confusing. A typical example relates to condoms. Faith-based organizations contradict government/NAC-sponsored messages on the role condoms can play in halting the spread of the infection.

POLICY RECOMMENDATIONS

The HIV and AIDS epidemic needs to be viewed as a national emergency by the public and private sectors, as well as by Malawi's major partners. The responses should be appropriate and timely to overcome an emergency, which is spiralling out of control. Prioritizing HIV and AIDS in government, development partner and private business agendas will help avert the impending catastrophe.

Addressing Human Resource Needs

With the severe shortage of human resources in both the public and private sectors, the quality and delivery of essential services, including those HIV and AIDS-related, are seriously challenged. Education, health and agriculture are affected in particular as the numbers of nurses, clinical officers, school-teachers and agricultural extension workers decline. Recommendations therefore include establishing, in the short-term, a means to address the crucial shortages and a long-term strategy that ensures sustainability and retention of the work force once the urgency of the situation has diminished.

Immediate action should focus on relieving the vital resource shortages affecting the delivery of essential services. Recruitment of foreign nationals, volunteers (UNVs, VSOs) and retired nationals on fixed term contracts of no more than five years and the encouraged return of those nationals working outside the country by means of incentives, could help rapidly improve the current dilemma in

the short-term. Preventing further loss of competent, skilled personnel to more attractive employment opportunities abroad and from AIDS-related deaths require dialogue with the international community and the provision of ARVs and other drug therapies to treat the disease and opportunistic infections.

Long-term it is suggested that universities and institutions of higher learning review and revise their policies that restrict student enrolment numbers for critical professions such as nursing, the education of health technicians and agricultural extension workers. For example, qualified students may be refused entry to core programmes at the University of Malawi and Malawi College of Health Sciences simply because the institutions are unable to provide housing and meals. Current policy requires students live in hostels provided by the education facility, even though many of the students' parents or guardians reside less than five kilometres away. Naturally, an institution's ability to provide accommodation will be limited, hence the restriction of enrolment numbers. This dilemma will clearly continue as long as the present accommodation policy exists.

Greater enrolment numbers are also necessary to ensure national security and stability within the Malawi Police Force and Army; both institutions suffer from high attrition rates believed to be HIV and AIDS-related.

Issues affecting staff retention in the public sector include low salaries, poor working conditions for professional staff, lengthy recruitment procedures and delays in confirming hires of recruited personnel. All these areas demand urgent attention.

Both short- and long-term strategies will require strong political will from the Government of Malawi, donor goodwill, strategic interventions and determination and the cooperation of all players. Reference has been made earlier to the use of volunteers through such programmes as the UNDP's

Southern Africa Capacity Initiative which provides UNVs. This programme is currently placing volunteer medical officers in hospitals in Malawi as a short-term solution to relieve the extreme shortage of doctors. The British government has a VSO programme while the Japanese government provides volunteers through JICA. There are also other government and non-government based organizations which offer volunteer services to developing countries. Malawi should take full advantage of these opportunities.

Mainstreaming HIV and AIDS Agenda in the Public and Private Sectors

With HIV and AIDS pervading all of society, public and private sectors should assume responsibility for mainstreaming an HIV and AIDS approach in all core business activities. Government policy supports a 2% budget allocation for HIV and AIDS activities within each government ministry and department. However, execution of such programmes by several ministries and departments is not possible due to capacity issues. This also holds true for many city and district assemblies charged with decentralizing HIV and AIDS activities to the community level. Addressing the problem requires technical expertise to help speed up implementation of HIV and AIDS programme activities. Facilities need to be made available to simplify grant application mechanisms and increase the pace in awarding them. Finally, guidelines for monitoring the public sector to ensure the 2% annual budget allocation for HIV and AIDS activities is being implemented as planned, should be put in place.

Scaling Up Bio-Medical Services

Existing evidence indicate that bio-medical services (VCT, ARVs, PMTCT and drugs) are effective interventions for the prevention of HIV infection and for the management of AIDS. These interventions also provide synergy between prevention and care. Although the number of people accessing VCT services has increased over the years, the figure (11% adults) is still too low given the magnitude of the epidemic. Services are still

not available in many rural areas. The number of people trained to provide HIV and AIDS counselling remains inadequate, as is the number of health care workers capable of carrying out whole blood rapid HIV testing. The same situation applies to the provision of ARVs. Only around 3,000 AIDS patients were receiving ARVs at the beginning of the year; the majority of these were from urban areas. It is highly unlikely that the projected 36,000 patients by December 2004 and 80,000 by December 2005 will be reached unless deliberate and aggressive decisions for rapid scale up are taken and implemented. Increasing the number of people on ARVs will ensure that some individuals will return to work, thereby easing the scarcity of trained manpower. The numbers of health personnel able to practice ARV therapy can be increased by ensuring that training institutions for doctors and clinical officers provide the necessary training prior to graduation.

Mother-to-child transmission of HIV is an area where successful interventions exist for preventing the spread of the virus to the child; yet in Malawi only 3% of pregnant women were able to access these services, which are presently limited to just a few hospitals. Part of the limitation is the voluntary nature of the services. Pregnant women must volunteer for counselling and testing for HIV infection and inquire after their final test results. One public health approach preventing vertical transmission is to screen all pregnant women and then provide treatment for all those who are infected, along with their children. A public dialogue, however, is necessary so that the community appreciates and understands this approach to the epidemic. PMTCT services could also provide alternative arrangements for the large number of women who attend antenatal services but who prefer to deliver at home in the absence of formal health care providers.

Transfusion of HIV infected blood almost guarantees transmission of the virus and yet the implementation of the EU supported Malawi Blood

Transfusion Service (MBTS) project is slow. Coverage is still limited to urban Blantyre. It is recommended that government and its partners facilitate speedy implementation of the MBTS to ensure that blood transfusions do not depend on possible donations from HIV infected relatives, but rather voluntary, non-remunerated donors. Training in appropriate use of blood and blood products should be part of the formal training of medical undergraduates and clinical officers. Sustainability for the MBTS after EU funding ends should be planned for to ensure continued and uninterrupted availability of safe blood for transfusions. Knowledge and practice of universal safety precautions needs to become an institutionalized part of bio-medical sciences training.

Condom promotion and use offer more opportunities to reduce HIV infection, especially in the youth and those with multiple sex partners. Condom use in Malawi though is embattled by confusing messages from faith-based organizations who articulate a moralistic approach to HIV and AIDS prevention. Preventing HIV and AIDS should promote methods combining benefits of both abstinence and condom use. HIV and AIDS programmes must emphasize that no single strategy will prevent HIV infection for all those at risk.

The above bio-medical services need to be championed by the health sector with the Ministry of Health at the helm. The change from NACP to NAC led to the fragmentation of the ministry's HIV/AIDS Unit at headquarters and units at the regional levels. This weakened the supervisory functions available to the districts. It is recommended the ministry urgently reconstitute and strengthen its HIV/AIDS Unit, but in doing so, an adequate mix of skills will be necessary.

Focusing Intervention on most “At Risk” Groups

Location

According to NAC surveillance data, the epidemic

is shifting to the Northern region and rural areas of the country. The districts of Nsanje and Nkhata Bay now have some of the highest rates of HIV infection and incidence. Although no research to date explains why this is the case, anecdotal evidence suggest only a few organisations are involved in HIV and AIDS activities in these areas. Both districts purport strong cultural traditions of wife inheritance. Nsanje, as with the rest of the lower Shire, practices a death cleansing ritual called “kulowakufa”. These districts and numerous rural areas are in need of more HIV and AIDS-related programme assistance.

Gender

Girls and young women are the fastest growing populations of newly HIV infected persons. Girls should be encouraged to stay in school longer than is currently the case by addressing the reasons why they dropout. In Chikwawa, the Bush Hospital project is encouraging girls to attend functional literacy classes after completing their daily chores at home. These classes, combined with training in income generating activities, can reduce the poverty that often puts young girls at risk of HIV infection by engaging in sex for money. These and other examples of successful projects should be multiplied in various regions of the country.

Although girls and women are more at risk of infection, men cannot be overlooked, especially those with disposable incomes. Men have more opportunity to contract and transmit HIV and usually determine the circumstances of intercourse. They often refuse to use condom protection.

Breaking Silence, Stigma and Discrimination

Leaders at various levels within the community should lead by example and promote open discussion of HIV and AIDS to reduce the lingering stigma and discrimination experienced by individuals affected and/or infected. There are but few families who have been spared completely from the painful experiences surrounding this disease.

Addressing Poverty

Remedies for addressing poverty in Malawi are beyond this report, still the need for meaningful inroads must be made in this area if further spread of HIV and the impact of AIDS are to be reduced.

CONCLUSION

Chapter 4 highlighted a number of deficits impeding the nation's ability to halt the spread of HIV and AIDS. At the same time, it put forward rec-

ommendations to address and overcome these shortfalls and thereby create an opportunity to affect a strengthened response in countering the epidemic and ultimately advance the nation's human development condition. The recommendations put forward, along with comments from candid debate at national level, are hoped to serve as important input to the Malawi Growth and Development Strategy and ultimately contribute to the realization of Malawi's Millennium Development Goals.

Bibliography

- Banda (2003). *Utilization study of standalone VCT services.*
- Barnett, T. & Whiteside, A. (2002).
- Bennel, et al. (2002).
- Bureau for Economic Research (2001). *Macroeconomic Impact of HIV/AIDS in South Africa.* No. 10.
- Bollinger, L. et al. (2000). *The economic impact of AIDS in Malawi.* Futures Group International, Centre for Development and Population Activities and Research Triangle Institute.
- Bose (2004, May). *Baseline finding on HIV/AIDS prevention in eight Malawi districts.*
- Brueton, V. (2003). *Knowledge, attitudes and practices of Malawian primary school pupils toward sexual and reproductive health: Results of a nationwide survey of primary school pupils.*
- Budget Document Number 2, *Various reports.*
- Chanika, (2003).
- Chawani, S. & Kadzamira, E. (2004). "The impact of HIV/AIDS on the education sector in Malawi examining policy, leadership and advocacy responses in the education sector," *Abstract E3 National HIV/AIDS Research Dissemination Conference, Kalikuti Hotel, Lilongwe, Malawi, 3-6 May.*
- Coombes (2001). *A literature review to support the situational analysis for the national behaviour change interventions strategy on HIV/AIDS and sexual and reproductive health.*
- Cuddington, J.T., & Hancock, J.D. (1994a). Assessing the impact of AIDS on the growth path of the Malawian economy, *Journal of Development Economics*, 43: 363-368.
- Cuddington, J.T., & Hancock, J.D. (1994b). Macroeconomic impact of AIDS in Malawi: A dualistic, labour supply economy, *Journal of African Economies*, 4(1): 1-28.
- Cuddington, J. T., Hancock, J.D., & Rogers, C.A. (1994). A dynamic aggregate model of the AIDS epidemic with possible policy interventions, *Journal of Policy Modelling*, 16(5): 473-496.
- de Waal, (2003).
- Florin, N., et al. (2003).
- Gender Equality Support Project (n.d.)
- GoM/UNDP (2002). *Malawi: National Human Development Report.* Lilongwe: UNDP.
- Gupta, (2000).
- Human Development Report (2001).
- Jackson, H. (2002). AIDS and social work in Africa. *Journal of Social Development in Africa.* Harare: School, Bd. 6 (1991), 1,S. 47-62; Band: 6(1991),1, S. 47-62.
- Joep, J.G., et al. ().
- Jones, C. (1996). *The microeconomic implications of HIV/AIDS: A case study of estate agriculture in Malawi.*

- Kadzamira, J. & Mvula, P. (2001). Social policy in southern Africa: The case of Malawi. *A Qualitative Report on Access, Quality and Relevance of Basic Social Service and Social Protection Programme in Malawi*. CSR/IDS Collaborative Research Programme.
- Kadzamira, E., et al. (2001). *The impact of HIV/AIDS on primary and secondary schooling in Malawi: Developing a comprehensive strategic response*.
- Kaseje, M., et al. (2004). *Experiences in the delivery of integrated home-based care and care and support services for orphans and other vulnerable children in Malawi*.
- Kishindo, P. (2003). "Gender and customary land rights in the Mpilisi extension planning area, Balaka." Unpublished manuscript. Department of Sociology, Chancellor College, Zomba.
- Lodhi, B. (1995). *Macroeconomic impact of HIV/AIDS in Malawi*.
- Malawi AIDS Counselling and Resource Organization (MACRO) (2003). *Annual Progress Report 2002-2003*.
- Malawi Demographic and Health Survey (2000).
- Malawi Demographic and Health Survey (2002).
- Malawi Integrated Household Survey (1998).
- Malawi Law Commission (2003). *Overview and issues of gender-based law reform in Malawi*.
- Millennium Development Goals (2002). Malawi Report.
- Ministry of Finance (n.d.). *Various Budget Documents*, Lilongwe.
- MGCS (2001). *Community Population and Education Project*, Lilongwe.
- MGCS (2003). *National Policy on Orphans and other Vulnerable Children*, Lilongwe.
- MLVT & NSO (2004). *Malawi child labour survey: Report of analysis*.
- Malawi Report (2002). *Millennium development goals*.
- Munthali, A. (2003). Hunger, public policy and child labour: Case study of Malawi. *Final report submitted to IPEC Programme*. Lilongwe.
- NAC (2003). *HIV Sentinel Surveillance Report*.
- NAC (2003). *National HIV/AIDS Policy: A call to renewed action*. Lilongwe: Government of Malawi.
- NAC (2003). *Joint review of the National HIV/AIDS Strategic Framework and Operations of the National AIDS Commission: A consolidated report*. Lilongwe: Government of Malawi.
- NAC (2003). *National estimate of HIV/AIDS in Malawi in 2003*. Lilongwe: NAC.
- NAC (2004). *HIV and AIDS in Malawi: 2003 Estimates and Implications*.
- NAC (2004). *National HIV/AIDS Research Dissemination Conference*. Lilongwe: Government of Malawi.
- National AIDS Control Programme (1999). *Malawi National HIV/AIDS Strategic Framework 2000-2004*. Lilongwe: Government of Malawi.
- National HIV/AIDS Strategic Framework (1999).
- National Economic Council (2000). *Adaptive Strategies and Coping Mechanisms: The Effect of HIV/AIDS on the Informal Social Security in Malawi*. Lilongwe: NEC.
- National Economic Commission (2000).**
- National Strategic Framework (1999).
- Neuman, F., et al.
- NSO (1998). *1998 Population and Housing Census*. Zomba: NSO.
- NSO (2000). *Malawi Demographic Health Survey*. Zomba: NSO.
- NSO (2002). *Malawi Core Welfare Indicators Questionnaire Survey Report of Survey Results*.
- Ngwira, et al. (2002). *Women's property and inheritance rights in Malawi*, Gender Studies Outreach Unit, Chancellor College, University of Malawi.

- NSO & ORC MACRO (2003). *Malawi DHS Ed. Data Survey 2002: Education data for DNSO decision-making*. Zomba, Malawi and Calverton, Maryland, USA.
- Over, M. (1992). *The macroeconomic impact of HIV/AIDS in sub-Saharan Africa*. The World Bank: Population and Human Resources Department. On-Line (http://www.iaen.org/files.cgi/335_macro.pdf)
- Palamuleni, et al. (2003).**
- Panos & UNAIDS (2000).**
- Phiri, J. et al. (2004). “The Impact of HIV/AIDS on Maize Production: The Case of Zomba District”. Abstract D7. National HIV/AIDS Reserach Dissemination Conference, Kalikuti Hotel, Lilongwe, 3-6 May.
- Report Number 17740 MAI. Malawi AIDS Assessment Study.
- Round Table Conference on HIV/AIDS in Malawi (March 2000), Lilongwe, Malawi.
- SADC (2003, June). HIV/AIDS Strategic Framework and Programme of Action.
- UNAIDS (1999). Gender and HIV/AIDS: Taking Stock of Research and Programmes.
- UNAIDS, UNICEF, & WHO (2002). Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Infections. Malawi 2002 Update.
- UNC Project at Kamuzu Central Hospital (2003).
- UNDP (2002).**
- USAID (2002). Africa Bureau Brief, No. 2.
- Van Oosterhout, Joep J.G., et. al. (2004). *Antiretroviral therapy at Queen Elizabeth Central Hospital in Blantyre, Malawi*.
- World Bank (1996).**
- World Bank (1998). Malawi: AIDS Assessment Study, Vol. 1 (& Annexes Vol.II).
- World Bank (2001). *Social protection of Africa’s orphans and other vulnerable children*. African Region Human Development Working Paper Series.

Appendix

TECHNICAL NOTES

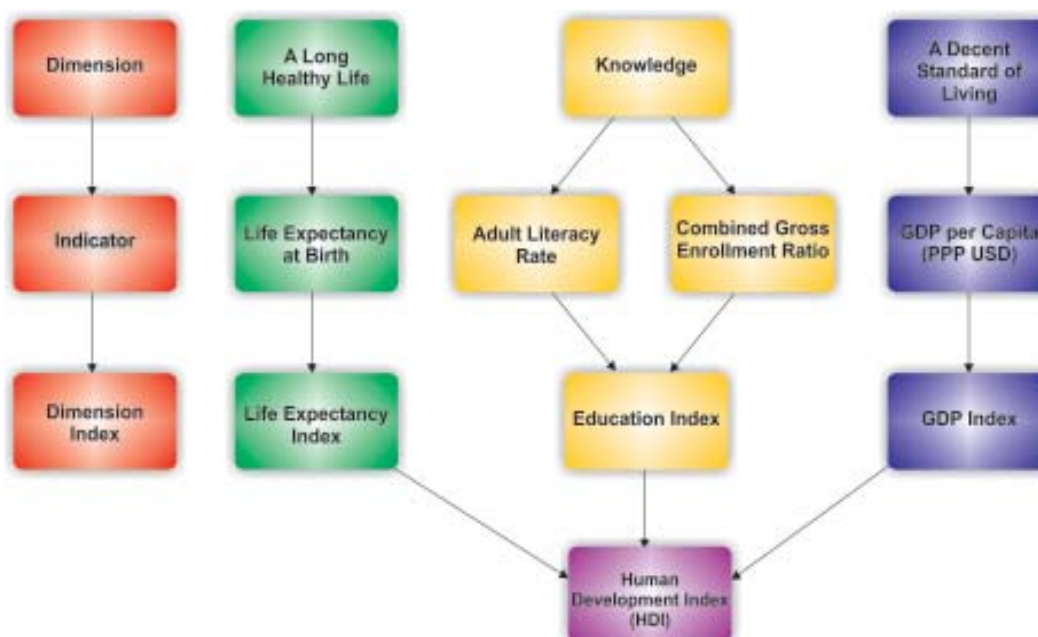
1. Human Development Index

Human Development Index measures the average achievement for a country according to three basic dimensions of human development:

- A long and healthy life, as measured by life expectancy at birth;
- Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrollment ratio (with one-third weight); and
- A decent standard of living, as measured by GDP per capita (PPP USD).

The process of calculating HDI is summarised in the chart below. Before HDI is calculated, an index must be created for each of these dimensions.

Calculating Human Development Index (HDI)¹



¹The processes for calculating HDI and the Formulae have been taken from the Human Development Report 2001.

Performance in each dimension is expressed as a value between 0 and 1 by applying the following formula:

$$\text{Dimension Index} = \frac{(\text{Actual Value} - \text{Minimum Value})}{(\text{Maximum Value} - \text{Minimum Value})}$$

The HDI is then calculated as a simple average of the dimension indices. Goal posts for calculating HDI are:

Indicator	Maximum Value	Minimum Value
Life Expectancy at Birth (Years)	85	25
Adult Literacy Rate (%)	100	0
Combined Gross Enrollment Rate (%)	100	0
GDP Per Capita (PPP USD)	40,000	100

2. Calculating Life Expectancy Index

The life expectancy index measures the relative achievement of a country in life expectancy at birth. The formula used is:

$$\text{Life Expectancy Index} = \frac{(\text{Life Expectancy} - 25)}{(85 - 25)}$$

3. Calculating Education Index

The education index measures a country’s relative achievement in both adult literacy and combined primary, secondary and tertiary gross enrollment. First, an index for adult literacy and one for combined gross enrollment are calculated. Then these two indices are combined to create the education index with two-thirds weight given to adult literacy and one-third weight to combined gross enrollment. The formulae used are:

a) $\text{Adult Literacy Index} = \frac{(\text{Adult Literacy} - 0)}{(100 - 0)}$

b) $\text{Gross Enrollment Index} = \frac{(\text{Gross Enrollment} - 0)}{(100 - 0)}$

c) $\text{Education Index} = 2/3(\text{Adult Literacy Index}) + 1/3(\text{Gross Enrollment Index})$

4. Calculating the DBP Index

The GDP Index is calculated using adjusted GDP per capita (PPP USD). In the HDI, income serves as a surrogate for all the dimensions of human development not reflected in a long and healthy life and in knowledge. Income is adjusted because achieving a reasonable level of human development does not require unlimited income. Accordingly, the logarithm of income is used. The formula used is:

$$GDP\ Index = \frac{(\log(GDP) - \log(100))}{(\log(40,000)^2 - \log(100))}$$

5. Calculating HDI

Once the dimension indices have been calculated, determining the HDI is straightforward. It is a simple average of the three dimension indices:

$$HDI = 1/3(\text{Life Expectancy Index}) + 1/3(\text{Education Index}) + 1/3(\text{GDP Index})$$

²The 2001 NHDR for Malawi used USD 6,040 as a maximum value. This report has used USD 40,000 as the maximum value based on the 2001 World Human Development Report.

TRENDS IN HUMAN DEVELOPMENT IN MALAWI

The Human Development Index (HDI) performance is expressed as a value between 0 and 1. A country with an HDI of 0.9 is better off than a country with an HDI of 0.1. The table below shows that the trend of Human Development in Malawi is still low. The methodology is outlined in the Technical Note.

Trends in HDI in Malawi for 2000 - 2002

Years	LE ³	AL ⁴	GER ⁵	GDP Per Capita (PPP\$) ⁶	Education Index	LE Index	GDP Per Capita Index (PPP\$)	National HDI
2000	37.3	60.4	74.0	611	0.649	0.310	0.302	0.420
2001	41.3	61.3	78.0	594	0.669	0.318	0.297	0.428
2002	37.6	62.1	77.0	578	0.670	0.328	0.293	0.430

Source: See Footnotes 2 to 5 and Technical Note

Trends in Public Finance Indicators

	'90/'91	'91/'92	'92/'93	'93/'94	'94/'95	'95/'96	'96/'97	'97/'98	'98/'99	'00/'01	'01/'02	'03/'04	'04/'05	'05/'06
Percent of GDP														
Public Expenditure	25.7	23.9	27	26.2	42.0	31.2	23.9	26.6	29.5	30.1	26.6	27.4	25.5	23.8
Total Revenue and Grants	21.6	21.7	20.9	20.6	26.7	25.5	21.0	18.4	24.0	24.4	28.4	30.1	26.5	34.6
Domestic Revenue	19.5	18.4	17.9	17.6	15.9	17.6	16.3	14.9	17.7	17.5	22.1	18.4	20.8	20.8

Percent of Total Budget Expenditure

General Services	27.0	24.8	25.8	38.1	26.7	21.9	28.1	25.6	25.0	25.0	23.6	27.8	38.4	38.4
Social Services	21.7	19.1	23.8	18.0	21.3	22.2	23.9	40.2	39.5	39.7	35.8	41.7	37.4	37.4
of which:														
Education	51.0	47.3	49.9	49.4	53.3	57.1	44.8	46.0	37.8	36.9	8.6	11.8	18.5	15.5
Health	31.3	34.7	33.7	30.1	37.5	32.4	24.2	18.7	26.4	21.5	6.0	9.2	12.5	12.5
Economic Services	23.8	32.4	21.0	25.0	23.0	15.4	12.0	12.7	13.1	21.3	28.5	19.9	24.2	24.2
Other Services	27.5	23.6	29.4	18.9	28.9	40.4	36.0	21.5	22.4	14.0	12.2	10.6	0.0	0.0

Source: Ministry of Finance - Various Budget Documents

³Life Expectancy (LE) data provided by NSO.

⁴Adult Literacy (AL) provided by NSO.

⁵Data on Gross Enrollment (GE) collected from Ministry of Education, Science and Technology.

⁶Figures used are estimates since NSO is currently not calculating the GDP per capita (PPP\$).

Trends in Selected Human Development Indicators

INDICATOR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GNP Per Capita (USD)	200	230	230	200	170	146	148	210	210	190	115.5	113.4	135.1	151.5
Life Expectancy	48.1	44.6	45.6	45.5	41.1	41.0	39.7	39.3	39.5	40.3	43.6	44.1	44.7	
AIDS Cases (per 100,000)		51.6	52.8	49.2	47.3	36.6	36.9	505.4	299.5	346.6	455.2	51.9	619.4	695.6
HDI Rank (from Bottom)	21	17	18	18	15	14	13	16	12	12				
HDI	0.168	0.260	0.330	0.321	0.320	0.334	0.389	0.399	0.385	0.397	0.420	0.428	0.430	
Combined Enrollment (%)		38	46	47	67	76	84	75	75	73	74	78	77	
Infant Mortality	144	143	143	142	147	137	140	135	134	132	132	131	128	127
Child Mortality			233	221	219	217	210	215	213	211	206	203	203	201
Adult Literacy	47.0	45.0	53.9	54.7	55.8	56.4	60.0	57.7	58.2	59.2	60.4	61.3	62.1	

Source: HDR 1993 to 2001; NSO; Ministry of Education

NOTE

There were a number of options that were considered in making forecasts. The option that was selected was the one which did not cause major breaks in the series. Options for forecasting the shaded figures were as follows:

- 1) Growth Rate = $((Y_t - Y_{t-1})/Y_{t-1}) * 100$
- 2) Average Growth Rate = $(\sum_t ((Y_t - Y_{t-1})/Y_{t-1}) * 100) / N$
- 3) Forecast (X, Yt: Yn, Xt: Xn)