BOTSWANA HUMAN DEVELOPMENT REPORT 2000

TOWARDS AN AIDS-FREE GENERATION

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All of Us

All of us
All of us are human beings,
All of us can become HIV positive,
All of us have rights,
All of us have responsibilities.

Let the world fight HIV,
Let the world conquer AIDS,
Let it not conquer us.
Do not fight us,
People with HIV,
People with AIDS.

Let the world fear HIV,
Let the world fear AIDS,
Let it not fear us,
People with HIV,
People with AIDS.

Let the world reject HIV,
Let the world reject AIDS,
Do not reject us,
People with HIV,
People with AIDS.

We need love
We need care,
We need support,
Above all we need acceptance.

BILLY MOSEDAME

FOREWORD

It is most fitting that Botswana's Year 2000 Human Development Report (BHDR 2000) should be on the theme "Towards an AIDS-Free Generation". This report comes three years after BHDR 1997, which addressed the theme "Challenges for Sustainable Human Development" and flagged HIV and AIDS as one of Botswana's major development challenges.

As a nation, we have never underestimated the challenge of human development. We nevertheless are proud of our human development record; one of success in rapidly building basic human capabilities - good health, literacy and decent incomes - and meeting basic human wants. It took us three decades to build this record. Yet, the HIV and AIDS epidemic threatens to wipe it out in less than a decade.

Whilst experts engage in debates about how many years of life expectancy we have lost on account of HIV and AIDS, we continue to live the reality of the epidemic. Too many of our people are visibly sick and we bury our young and able-bodied, educated and uneducated, in unprecedented numbers. We have never had a situation in which the adult death rate was highest amongst 24-29 year olds! Nothing we have experienced since independence causes as much human suffering and death as HIV and AIDS.

Our social safety nets have proved equal to the worst droughts Botswana has experienced as a sovereign state. We have, to a large measure, overcome illiteracy, malnutrition, and children's diseases and accorded our people accessible quality health services. We have reduced both the magnitude and prevalence of poverty. We have had tremendous success against livestock diseases. Compared to HIV and AIDS, these challenges were minor.

We may as a nation, be traumatised by HIV and AIDS. But we remain hopeful that this epidemic will be overcome. Approximately 80% of the Botswana population are HIV negative. About half of them are young people aged below 15 years. Until a cure for AIDS is found, these are our hope for an AIDS-Free generation.

"Towards an AIDS-Free Generation" expresses the same optimism that Batswana express in Vision 2016, wherein we envisage no new HIV infections amongst us by 2016. BHDR 2000 is therefore a vote of confidence in this ideal.

We have had ten years of information, communication and education on HIV and AIDS, emphasising change in sexual behaviour. Progress has been slow in the face of formidable barriers in the form of ignorance, denial and stigmatisation. Even so, there are indications that we may finally have made a breakthrough. Knowledge about HIV and AIDS is very high. People are beginning to talk more openly about the epidemic. Pregnancy amongst teenagers in school is reported to be on decline, even if only marginally.

We are now going through a phase in our national response in which a truly multisectoral response, including the private sector, organs of civil society and bilateral and multilateral development partners, can truly be mounted. The Government of Botswana has made resources available and development partners, including the private sector, have been generous in providing support.

But we dare not place all our confidence in the amount of financial resources mobilised against HIV and AIDS for they can only facilitate positive action on our part. BHDR 2000 calls for a "social revolution". We concur. This has always been the aim of our information, communication and education campaigns on HIV and AIDS. We need to refrain from behaviour that aids the spread of HIV. This includes intergenerational sex between adults and minors, unprotected sex, maintaining multiple sexual partners and failure to get timely treatment for sexually transmitted diseases. All sexually active people need to go for confidential voluntary HIV testing and counselling. There is also, an urgent need to address the structural

determinants of the epidemic - poverty, gender inequality and socio-cultural beliefs - with greater resolution. In this regard, I urge Batswana not to allow culture and religion to be encumbrances.

The ideal of an AIDS-Free Generation also requires upholding our values. We are not a promiscuous society. We do not condone the sexual abuse of children. Neither do we permit wife battering. We have a tradition of respect for marriage and good family life. We must therefore unite in maintaining these values and imposing tough sanctions on those who persist with anti-social behaviour.

We must also revive our culture of humanness, "Botho". Those who are living with HIV and AIDS require compassion and care from the rest of society and not rejection. Our response to the epidemic must be anchored firmly on respect for human rights and the dignity of the human person. Otherwise, stigma and denial will continue to frustrate our efforts. I am pleased to report that our current efforts at revitalising the national response address these issues and many others raised in this report.

On a more general note, I welcome BHDR 2000 as a positive contribution to the debate on national development in Botswana. I urge Batswana to read it and engage in discussions of the issues raised therein in an equally robust manner. More significantly, I share the optimism expressed in the report. We will achieve an AIDS-Free Generation in our time.

FESTUS MOGAE
PRESIDENT OF THE REPUBLIC OF BOTSWANA

PREFACE

A great many suggestions were put forward for a subject for Botswana's Human Development Report (BHDR) 2000, including some taken from the BHDR 1997. We chose to take up the challenge of producing a report which captures the impact of HIV and AIDS on Botswana's human development, analyses it and proposes practical solutions to the problem. The prevailing human development situation in the country made it almost impossible to select any subject other than HIV and AIDS.

While the Botswana UNDP office has undertaken many studies and reports, this particular report has proven to be a formidable task indeed. The reality of the situation is that the HIV and AIDS crisis is a rapidly unfolding drama whose study and analysis remains a fluid, complex and thus difficult undertaking even at the best of times.

Interestingly enough picking a title theme for the report proved, like most things to do with HIV and AIDS, also contentious. We wanted the theme "Towards an AIDS-Free Generation" because we believed that to make the whole enterprise of combating the epidemic worthwhile, perseverance and hope has to be re-enforced by the prospects of real success.

Having said that, it is our view that an AIDS-Free generation is not only desirable but possible in the Vision 2016 timeframe. The BHDR 2000 however, is not simply about creating an AIDS-Free generation. It strives for much more than that. The report takes a broad sweep at the human development condition in Botswana and comprehensively analyses its interface with HIV and AIDS.

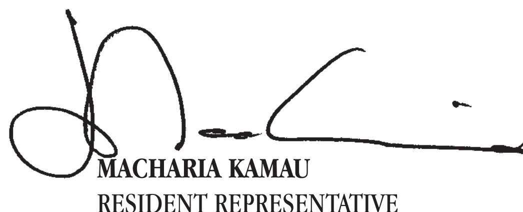
As was highlighted in the BHDR 1997, Botswana has made tremendous gains in human development since independence. Ironically, rapid economic growth, large infrastructure projects, new job opportunities that drive intra country migration have all collectively contributed to the spread of HIV in the population.

Since 1985, when the first case of AIDS was diagnosed, laudable efforts have been made by the Government of Botswana to mitigate the effects of the epidemic. Unfortunately, these efforts have mostly fallen short of the mark. Stigma, discrimination, denial, ignorance, silence and the persistence of behaviour that aids the spread of the epidemic remain formidable obstacles to halting the spread of HIV and AIDS in the society.

BHDR 2000 recommends a three-pronged approach to tackling the epidemic, which can be summed up as *prevent, treat and develop*. A key contribution of the BHDR 2000 is the work done in undertaking a fresh look at the main determinants of the spread of the epidemic in Botswana. The BHDR 2000 develops recommendations for action which address, in a targeted and monitorable fashion, the known entry points of the epidemic in the society and the primary drivers and multipliers that accelerate its spread.

We hope we have produced an interesting and useful report that will not only contribute to the growing literature on HIV and AIDS in Botswana, but that will also have a practical impact on HIV and AIDS policy and programmes in the country.

Let me end by recognising that the BHDR 2000 was undertaken as a collaborative effort between the Government of Botswana, UNDP and the Botswana Institute for Development Policy Analysis. Significant technical and editorial contributions were also received from outside Botswana and these are recognised in the Acknowledgements. The BHDR 2000 Reference Group that provided comments and a much needed Sounding Board for the report, together with the BHDR team in the UNDP Botswana office, ultimately made this report possible.



MACHARIA KAMAU
RESIDENT REPRESENTATIVE

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1 Charity Nkala, Constance Formson, Debbie Tlhomelang, Hans Cajus Pedersen & Sennye Obuseng

ABBREVIATIONS

AIDS	-	Acquired Immune Deficiency Syndrome
ANC	-	Antenatal Clinic
ASSA	-	Actuarial Society of Southern Africa
ASU	-	AIDS and STD Unit
BBCA	-	Botswana Business Coalition on AIDS
BIDPA	-	Botswana Institute of Development Policy Analysis
BONASO	-	Botswana Network of AIDS Service Organisations
CBO	-	Community Based Organisation
CEDAW	-	Convention on the Elimination of All Forms of Discrimination against Women
CHBC	-	Community Home- Based Care
CSO	-	Central Statistics Office
DDC	-	District Development Committees
FAP	-	Financial Assistance Policy
FDI	-	Foreign Direct Investment
FHS	-	Family Health Survey
GDP	-	Gross Domestic Product
HDI	-	Human Development Index
HDR	-	Human Development Report
HIES	-	Household Income and Expenditure Survey
HIV	-	Human Immuno Deficiency Virus
HPI	-	Human Poverty Index
IEC	-	Information, Education and Communication Programmes
IPT	-	Isoniazid TB Preventive Therapy
MTCT	-	Mother to Child Transmission
MTP	-	Medium Term Plan
NACA	-	National AIDS Coordinating Agency
NACP	-	National AIDS Control Programme
NGO	-	Non-Governmental Organisation
PLWA	-	People Living with AIDS
SADC	-	Southern African Development Community
STD	-	Sexually Transmitted Disease
STP	-	Short Term Plan
UNAIDS	-	United Nations Joint Programme on AIDS
UNDP	-	United Nations Development Programme
UNICEF	-	United Nations Children's Fund
VCT	-	Voluntary Counseling and Testing
WHO	-	World Health Organisation

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Overview

TOWARDS AN AIDS-FREE GENERATION

By the year 2016, the spread of the HIV (Human Immuno-Deficiency Virus) virus that causes AIDS (Acquired Immuno-Deficiency Syndrome) will have stopped so that there will be no new infections by the virus that year.

- Long Term Vision For Botswana, p 9 -

The Botswana Human Development Report (BHDR) 2000 is the second in a planned series that started in 1997. BHDR 1997 was on the theme *"Challenges for Sustainable Human Development – A Longer Term Perspective"*. The report recommended nine issues for consideration as themes for future BHDRs, amongst them is HIV and AIDS. This report picks up the challenge on HIV and AIDS precisely because HIV and AIDS and the related problem of poverty are potentially the top development challenges facing Botswana. It takes a forward looking view of HIV and AIDS and development in the context of Botswana's Long-term Vision, Vision 2016, and proposes work *Towards an AIDS-Free Generation* in Botswana by 2016 as a long-term response.

A HUMAN DEVELOPMENT CRISIS LOOMS

With the highest reported HIV prevalence rates in the world, Botswana is set to experience the most devastating epidemic to hit Southern Africa in recent memory. About 300,000 Batswana out of a population of approximately 1.6 million are now living with HIV and AIDS. Without affordable and accessible treatment, most of them will develop AIDS and die within a decade, taking with them the promises their prematurely cut lives held for society.

HIV and AIDS is wiping out decades of laudable achievements in human development. It has unleashed untold misery and human suffering, deepening poverty, social dislocation and economic hardship upon a population that has until the mid-1990s got used to ever improving standards of living. The health care system is now overwhelmed, the education sector is under severe strain while households are becoming trapped in a vicious circle of disease, death, psychosocial trauma and poverty. Traditional coping mechanisms, on decline prior to the onset of the epidemic, are being stretched beyond breaking point at the community level. The epidemic threatens to tear apart the very fabric of society.

Estimates of HIV prevalence rates vary but they convey the same message: the epidemic has reached crisis proportions. According to the lowest estimates, more than one in four (about 28%) Batswana aged 15-49 years are infected with HIV. UNAIDS estimates the HIV and AIDS prevalence rate for the same cohort at about 36%. About 85 persons are being infected with HIV every day and one in eight infants are being infected at birth. Botswana can expect to see a sharp rise in infant and child mortality rates.

But Botswana can minimise the magnitude of the catastrophe that these statistics imply. Its main window of hope is the 80% of the entire population, about 1.28 million people, who are free of HIV infection. More than half of these are in the under - 15 age category, among

whom HIV prevalence rates are estimated at less than 2%. Keeping the HIV-negative part of the population uninfected offers Botswana the best prospects for an AIDS-Free generation by 2016 and the preservation of human development gains earned over three decades of uninterrupted economic prosperity.

Vision 2016, envisages a just, caring and compassionate society in which there will be no new HIV infections by 2016. That goal is within reach. But it will require renewed efforts to bring forth a social revolution that will yield the breakthrough in sexual behavioural change that has eluded Botswana since the late 80s; one in which attitudes tend towards personal and collective responsibility to ensure safe sex. Botswana's anti HIV and AIDS campaign is blessed with strong political leadership and a formidable national resolve to overcome the epidemic. President Festus Mogae has assumed personal responsibility for the leadership of the campaign and has infused a great sense of urgency and purpose into the national response to the epidemic.

The Antithesis of Human Development

Botswana's HIV prevalence rates suggest the emergence of an enormous human development crisis. HIV and AIDS strikes at the very core of human development. It shortens human life, erodes people's sense of dignity and self-esteem, causes social exclusion and traumatises and impoverishes individuals, families and whole communities.

Already there is evidence of an emerging class of households recently impoverished by HIV and AIDS. AIDS kills people in their most productive years and does so very slowly. From infection to death, individuals and their families are impoverished as treatment and care drain their lifetime savings. Failing health weakens their capacity to earn, resulting in worsening deprivation and a deterioration in people's physical and mental wellbeing. The epidemic reverses gains in building basic human capabilities and denies people the basic opportunities for living long, healthy, creative and productive lives – the very essence of human development.

AIDS puts unbearable strain on communities and their ability to care for the ill and dying, the elderly and the increasing number of orphans. Women are the hardest hit. They have to cope with their own illnesses; care for other family members who fall ill and shoulder a disproportionate burden of household work for as long as their health permits.

Every sector of the economy will be affected by HIV and AIDS. Scores of skilled people, educated at great expense to the nation continue to die with their skills and experience. The losses are felt both within the Government and the private sector as institutions find it ever more difficult to replace lost staff and care for those who are sick. The capacity of the Government to provide essential social services – health and education for instance – is being reduced. The combination of declining labour productivity and rising labour costs could cause extensive damage to the competitiveness of Botswana and her future growth and development prospects.

A Government study on the Macro-economic Impacts of HIV and AIDS projects that by 2021, the economy, as measured by the size of Gross Domestic Product (GDP), would be 24-38% less than what it would have been without HIV and AIDS. HIV and AIDS induced declines in labour productivity, rising labour costs and declining competitiveness in a rapidly globalising world will combine to hurt Botswana's economic prospects. The country's dependence on diamond mining – its main source of Government revenue (53%) and foreign earnings (79%), may increase as some of the sectors that have hitherto been promoted as alternative sources of growth – manufacturing and services for instance – falter on account of the effects of HIV and AIDS.

The Groundwork Has Been Done

In recognising the formidable task at hand, the fact that the valiant response by the Government of Botswana and its partners has not prevented the epidemic from spinning almost out of control has to be confronted head on. The ultimate indicator of success for any HIV and AIDS prevention programme is the extent to which rates of new infections have been reduced. Like the global response, Botswana's was initially fraught with ignorance and denial and hobbled by failure to confront the structural determinants of the epidemic.

In the 1990s, huge resources were devoted to HIV and AIDS campaigns, notably information and awareness campaigns. But these campaigns appear not to halt, or even slow down, the advance of the epidemic. Surveys showed that most people were relatively well informed about HIV and AIDS, thanks to Government and Non-Governmental Organisations (NGO) awareness campaigns. Yet by 1995, HIV sero-prevalence among pregnant women in Botswana's largest urban areas had passed the 30% mark.

Clearly, people were not translating knowledge and awareness about HIV and AIDS into behaviour that would protect them from HIV infection. The measures had not addressed important determinants of the spread of the epidemic. People's choices are shaped by a multiplicity of factors, many of which operate beyond their immediate and direct influence. The HIV and AIDS response was not addressing the underlying structural realities that enable

the epidemic to spread. As a result, the availability and absorption of information were in the final analysis not sufficient to cause people to change behaviour in the numbers required to contain the epidemic.

Commendably, the Government of Botswana's Medium Term Plan II (MTP-II) process has sought to draw in other stakeholders, NGOs and private firms for instance, and recognise the profound social, economic and cultural dimensions of HIV and AIDS. If translated into practice it will mark a major breakthrough in the fight against the epidemic. Indeed, the Revised National Policy on HIV and AIDS urges a concerted multisectoral response to what it correctly describes as a national crisis.

The Government of Botswana has done well to put HIV and AIDS firmly on the social and development agenda. It has just launched a comprehensive anti-HIV and AIDS social mobilisation exercise. It has put in place programmes to reduce the spread of HIV and mitigate the socio-economic effects of the epidemic. Amongst the measures are a multisectoral anti-HIV and AIDS programme, home-based care, mother to child transmission programmes, orphan care programmes and the introduction of education on HIV and AIDS into primary and secondary school curricula. Knowledge of HIV transmission is widespread throughout society. The missing link is behavioural change on a large scale.

THE DYNAMICS OF THE HIV AND AIDS EPIDEMIC

After a decade of persistent effort with little discernible impact on the spread of the HIV and AIDS epidemic, Botswana now has to re-energise its anti-HIV and AIDS campaign. This requires an accurate understanding of the magnitude of the epidemic and the factors behind its spread. The immediate determinants are encapsulated in the phrase "risky behaviour" and include unprotected sex, keeping multiple sexual partners and commercial sex work. The underlying factors are those that provide the rationale for risky behaviour. These are detailed in Chapter 2 of the report. This section gives a brief introduction to seven of them.

1. *Intergenerational Sex*[1]

Disparities in HIV prevalence rates amongst boys and girls aged below 15 and those among young men and women aged 15-29 suggest that HIV is transmitted across generations primarily through sex between men and considerably younger women. In the age group 0-14 years, females are twice as likely to be infected as males. The relative risk of infection gets even higher for young women in the age group 15-29 – where three cases of HIV -positive females were reported for every HIV-positive male. The pattern tends towards 1:1 in subsequent age brackets. This suggests that women are infected with HIV at much younger ages compared to men and that HIV is transmitted from older men to young girls, who in turn infect boys their own age. In this way, the HIV epidemic is sustained from one generation to another.

The biggest challenge now is to break the cycle of intergenerational transmission of the virus. For an AIDS-Free generation to be secured, intergenerational sex has to be eliminated, risky behaviour reduced within generations; and the security of blood supplies assured. Bold leadership, fresh approaches, new actors and more resources are needed to achieve this goal and secure the future of human development in Botswana. In this regard, four immediate challenges must be met with resolution. These are;

a) To protect HIV-negative people from infection:The immediate focus should be on the ABC of safe sex – Abstain, Be faithful and Condomise – and voluntary HIV counselling and testing; eliminating intergenerational sex; and making intra generational sex safer.

b) To reduce HIV prevalence rates among the cohort younger than 15 as it ages: For young people, three "NOs" of responsible sexual behaviour should be inculcated.

   NO SEX BEFORE HIV TESTING
   NO SEX WITHOUT A CONDOM
   NO SEX OUTSIDE OWN COHORT

c) To provide adequate care and support for People Living With AIDS (PLWA) and recognise and protect their right to non-discrimination and full participation in the social, economic and political lives of their communities.

d) To reduce the levels of poverty and inequality. Too many Batswana, especially women, are forced to survive by engaging in activities that heighten their risk of HIV infection.

2. *Mother to Child Transmission (MTCT)*

In the absence of comprehensive MTCT programmes, the HIV prevalence rate for children under 4 years of age is a function of increased HIV prevalence among women of childbearing age. AIDS cases in this age group result from mothers transmitting the virus to their children during pregnancy, birth or breast-feeding. It is estimated that

7,000-9,000 babies are being infected annually through MTCT in Botswana.

Reducing MTCT requires three closely related interventions:

a) Joint HIV testing for couples that want to have a child. Only babies born to parents who are HIV-negative are guaranteed a zero risk of infection through mother to child transmission. HIV testing is, as a rule, recommended for all. It is essential for individuals to manage their personal lives more positively and to inform the national response more accurately.

b) Fostering a "culture" of voluntary counselling and testing (VCT) for pregnant women. Unless expectant women know their HIV status, they will not be in a position to take action to reduce the risk of HIV infection to their unborn children.

c) Providing short course preventive therapy for MTCT. Two gains are made as result. First, the risk of HIV transmission to the unborn child is reduced. Second, availability of preventive therapy provides a positive incentive for testing.

3. Gender Inequality

Studies suggest that gender inequality could explain the higher rate of HIV infection among women compared to men in Botswana. Inequality between men and women manifests itself amongst others in unequal employment opportunities, unequal access to wealth, unfair division of labour in the household and generally unequal power relations. It is also manifest in violence against women, including battery and rape.

For these reasons, this report stresses the links between HIV infection, poverty and gender inequality and recommends strong action to empower women to take control of decisions relating to their sexual and reproductive health; and to change men's attitudes.

4. The link between STDs and HIV infection

The risk of HIV infection amongst men and women with Sexually Transmitted Diseases(STDs) is considerably higher than that for people with no genital infections. It is generally difficult for the virus to penetrate healthy skin. Therefore the extensive damage to genital mucosa that results from sexually transmitted infections aids the transmission of HIV during sex. Good management of STDs reduces the risk of infection considerably. Consistent and correct condom use is even more effective and should be urged upon the population. Condoms should be made readily available.

5. Mobile Populations

The Botswana population is very mobile, thanks to reasonably good incomes and good transport infrastructure.

Unfortunately, for a lot of frequent travellers, it is common to have casual sexual partners. The same is true for workers in major development projects. Isolated from traditional cultural and social networks, mobile populations will often engage in risky behaviours. A 1999 study on mobile population groups found a strong link between high human mobility and the spread of HIV and AIDS. Thus, within the broad national response to HIV and AIDS, there should be room for special initiatives for people whose careers include frequent travel. These include long distance truck drivers, hawkers and mobile building contractors.

6. The Complex Role of Poverty

Despite Botswana's impressive human development record over the first three decades after independence, almost one in two Batswana still live in poverty. Poverty is an important factor in the transmission of HIV. Perhaps more than anything else, it informs many of the undesirable choices made by poor people, including behaviour that increases the risk of HIV infection – alcohol abuse, multiple sexual partners and sex for money. Thus in conditions of poverty, any response to HIV and AIDS that fails to appreciate why poor people adopt particular survival strategies will have less than the desired impact.

But it would be an oversimplification to treat poverty as *the* ubiquitous, indeed necessary, co-factor in the spread of HIV. In urban Botswana, *inequality* appears to be as important a co-factor – especially where material and gender inequalities overlap. This report therefore urges that as part of a long-term response concrete measures to eradicate poverty and reduce inequalities be incorporated into the national response.

Such efforts would include support for greater social mobilisation among the poor to participate in state-led economic empowerment programmes: micro-financing schemes, small-scale urban agricultural projects, improved food security, and self-employment initiatives. Overall, Botswana's success in containing the HIV and AIDS epidemic will depend on the extent to which the country's development strategy puts emphasis on the reduction of poverty and inequality.

7. *Silence and Denial*

The experiences of Uganda, Senegal and Thailand show that candour and openness about HIV and AIDS and sexuality breed success in a campaign against the HIV and AIDS epidemic. The epidemic thrives in conditions of silence and denial, not just by ordinary people but especially by leaders. It is the silence and denial that breeds stigma and discrimination. At least one in four sexually-active Batswana are estimated to be HIV-positive, yet most do not know their HIV status. Unless the silence is broken, the epidemic will run through its full cycle with dire consequences for Botswana.

The openness with which the leadership in Botswana has approached the epidemic should filter down to the people. It is therefore encouraging that voluntary testing centres report an increase in the number of people, many of them young, going for voluntary HIV testing. There is hope that the epidemic may be coming out into the open and everything must be done to encourage Batswana to speed this up and speak openly about HIV and AIDS and sexuality wherever they are.

FACING THE CHALLENGE

The political leadership in Botswana has demonstrated the will to contain and reverse the spread of the HIV and AIDS epidemic in the most emphatic manner. President Festus Mogae personally leads the campaign against HIV and AIDS. His leadership has turned every cabinet Minister into an active campaigner against the epidemic. Structures to respond to the epidemic have been put in place. The Government finances 80% of the cost of the anti-HIV and AIDS campaign. The major challenge is for every Motswana to take up the cudgels on the side of the leadership and become part of the solution.

All sectors must come on board. The ideal of an AIDS-Free generation by 2016 is within reach. The private sector, structures of civil society and Batswana as individuals have to take responsibility and make an AIDS-Free generation a reality. As a strategy towards this end, prevention is self-evident. There is no cure for AIDS. Therefore, comprehensively mobilising society to consistently observe the ABC of safe sex is still the best response to the epidemic.

Can an AIDS-Free generation be achieved in Botswana?

It is a strong possibility. The experience of Uganda shows that it is possible to move from very high to low HIV prevalence rates in a short time. Botswana has a lot going for it in this regard.

a) The political will is strong and so is international support for a comprehensive national response. More specifically HIV and AIDS ranks very high in President Mogae's priorities.

b) The institutional infrastructure is in place. The National AIDS Co-ordinating Agency (NACA) co-ordinates a network of ministerial, district and departmental HIV and AIDS committees and an ever expanding private sector and NGO response.

c) Preliminary evidence suggests that after more than a decade of relentless effort, attitudes may finally be changing. Even in conditions of extreme poverty, death and trauma on the scale now being experienced in Botswana can force behavioural change. Society has been mobilised.

d) Botswana has a history of good crisis management. It has managed well through years of drought and recently crushed the cattle lung disease in Ngamiland. The HIV and AIDS epidemic is, however, very different from drought and the cattle lung disease. It is infectious and kills people. None of the crises Botswana has gone through offers directly usable tools.

If the substantial volume of resources that have been mobilised against HIV and AIDS; the political will so forcefully demonstrated by Government; and society's impatience with an epidemic that quietly consumes people and then explodes can be channelled into a comprehensive multi-sectoral response, the Vision 2016 goals will be achieved.

A THREE-PRONGED APPROACH

This report recommends a three-pronged approach to HIV and AIDS. It focuses on:

a) *The prevention of new HIV infections, especially among young Batswana*. In the absence of an AIDS cure, prevention is the basis for an AIDS-Free generation.

b) *Treatment and care for People Living With HIV and AIDS*. People Living with HIV and AIDS have a fundamental right to health which must be respected and promoted along with their other rights of citizenship. Discrimination against PLWA is in general counter productive because it fuels the stigma that has to date kept the disease largely underground.

c) *A developmental approach to managing the HIV and AIDS epidemic*. If risky behaviour persists

even amongst people with information on HIV and AIDS, there must be factors that make it impossible for them to use such information. Poverty and inequality can act as strong barriers to behavioural change for in the immediate present, they create exigencies greater than avoiding an infection with no immediate consequences. Hunger and fear of physical assault could impair judgement to that extent.

a) Prevention

Presently, prevention is the most effective measure against HIV and AIDS. Botswana's strategic focus therefore lies in preventing the 80% of the population that is presently uninfected from getting infected. Three aspects of this strategic focus are emphasised in this report.

Protecting the Young

Except for those who are born with HIV, all children will remain HIV-negative until they have sex with someone who is HIV-positive or contaminated blood enters their body. Almost invariably in the case of girls and young women, the sex will be with an older man and would be either consensual or rape.

Critical responses are required at two levels. First, a social revolution of sorts is required to revamp social sanctions against sex between older men and girls and to change attitudes towards sex so that open discussion on HIV and AIDS and sex could begin to take place. Girls must be allowed to grow into young women without pressure to engage in sex with adult men. For this to happen, quality sex education must begin at home and continue at school. It must address the problems of HIV and AIDS and sexuality openly and honestly.

Second, the justice delivery system must serve children better. From investigation, through prosecution, the system must have compassion for victims of sexual offences. There should be specialised training for police officers who handle cases of survivors of sexual abuse to ensure that they are treated with respect and dignity. There should also be strict enforcement of laws against sexual harassment and abuse of minors at home, at school, colleges and in the workplace.

The report recommends that the President should initiate dialogue with leaders in Parliament, the Vision Council and the House of Chiefs on a vision for an AIDS-Free generation, focusing on the issue of older men transmitting HIV to young girls. But this dialogue must be spread throughout society - with the aim of explicitly acknowledging, refuting and condemning behaviour and myths that fuel intergenerational transmission of HIV. Consistent and correct condom use must be encouraged.

Breaking the Cycle of Poverty and Disease

A broad social movement needs to be mobilised to tackle the links between inequality, poverty, gender discrimination, and the AIDS epidemic. An expanded poverty programme is essential for an effective response. Such programmes should especially support women, and seek to move them away from dependence on men and survival strategies built on high-risk activities. They would include greater access to micro-finance and business support schemes, as well as broadening educational opportunities for women. Chapter 2 discusses the link between poverty and HIV and AIDS in detail but it should be sufficient in this overview section to note that poverty creates the conditions in which diseases, including HIV and AIDS thrive.

A poverty response to health and HIV and AIDS in particular is thus recommended to target deprivation as a factor that predisposes people towards risky behaviour.

Limit Infections within Stable Relationships

One of the tragic aspects of the HIV and AIDS epidemic is the large number of men and women who get infected with HIV in the context of steady relationships. Mutual faithfulness, regular testing for both couples and condom use should be encouraged even in the context of marriage. Women should be empowered through information that seeks to change the attitudes of both men and women and measures that seek to eliminate all forms of discrimination against women. For instance, the statutes should cease to treat married women as minors. Women's economic empowerment should be pursued as a long-term response that seeks to strengthen their positions in sexual relationships.

b) Treatment and Care

The International AIDS Conference in July 2000 in Durban, signalled a turning point in the quest for equitable access to HIV and AIDS treatment in developing countries. The public health system in Botswana provides treatment for AIDS-related illnesses. It does not, however, provide anti-retroviral therapy for PLWA. The report recommends that consideration should be given to provision of anti-retroviral drug therapy to PLWA. Botswana should derive inspiration from Brazil's success in guaranteeing universal access to drug therapy for PLWA and building the infrastructure and human resource capacity for administrating and monitoring anti-retroviral drug therapy programmes.

Providing more and better care for PLWA is a human rights as well as a development priority. People living with HIV and AIDS have a right to dignified existence. Besides, for as long as they are fit to work, PLWA can make a

contribution to the development process. Home-based care initiatives have a role and are especially suitable for some situations. The state, donor and private sector support for these activities is essential.

c) *Development*

Straddling all these measures is the need to integrate Botswana's HIV and AIDS strategy into the mainstream of development and poverty reduction activities. The emphasis of the recommended strategy *towards an AIDS-Free generation* clearly rests on prevention. But prevention ultimately succeeds only if people are enabled to adopt appropriate behaviour.

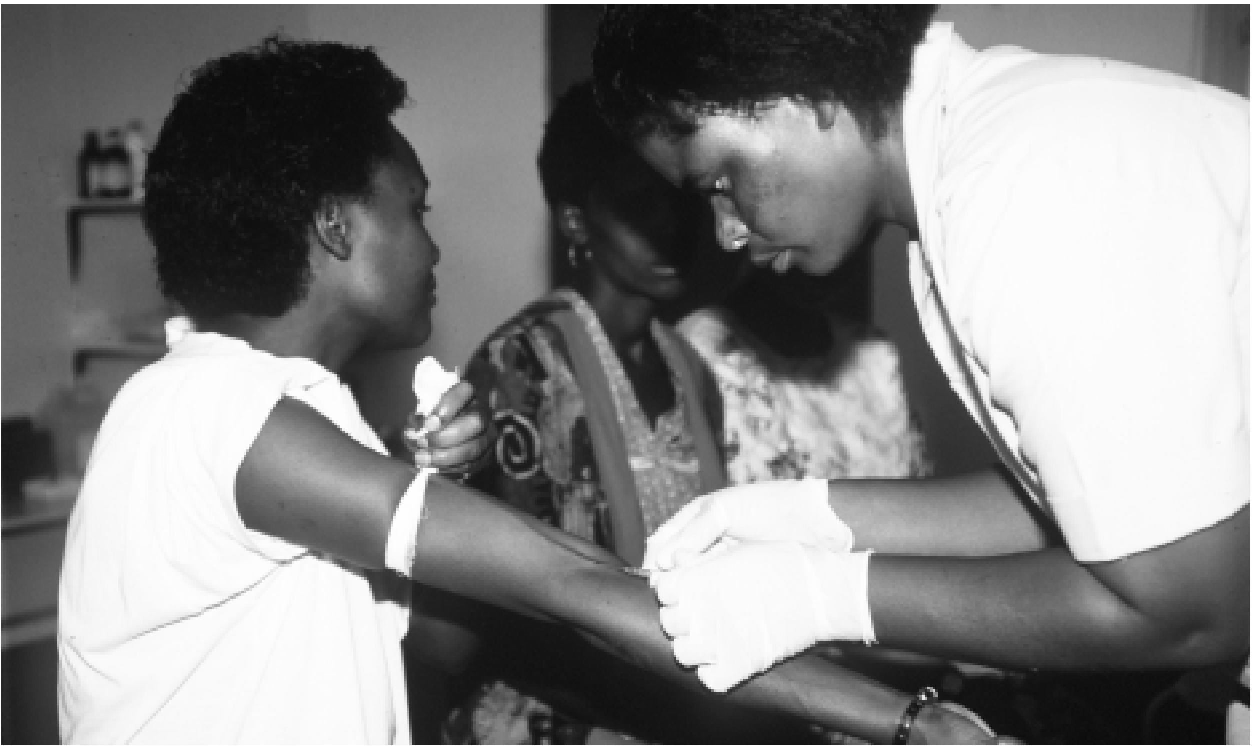
Botswana's prospects for achieving an AIDS-Free generation will improve if its development strategy puts sufficient emphasis on reduction of poverty and inequality. In both cause and effect, poverty, inequality and the HIV and AIDS epidemic are intimately linked.

Bold initiatives to reduce poverty and inequality and create an environment more receptive to prevention measures are required. These will require support for greater social mobilisation among the poor, as well as state-led programmes in micro-financing, small-scale urban agriculture, improved household food security and self-employment activities. Presently, the Government is reviewing its poverty programme with a view to developing a comprehensive poverty reduction strategy that will deliver on the Vision 2016 targets. This process provides an opportunity for deliberate integration of HIV and AIDS into development.

Botswana has set itself the ambitious goal of reducing the incidence of poverty to zero by 2016. If poverty targets are met, significant progress would be made towards the HIV and AIDS targets. Given the strong poverty-HIV and AIDS link, the national anti-HIV and AIDS effort could benefit from continuous monitoring of poverty. The report thus recommends a system for continuos monitoring of poverty.

A wealthy nation is a healthy nation: A healthy nation is a wealthy nation. These simple statements communicate a powerful message. On average, poor people will not have good health and unhealthy people will not have wealth and prosperity. There will be no human development for Botswana unless the HIV and AIDS epidemic is overcome. Overcoming HIV and AIDS is to some extent conditional on overcoming poverty. Both can be done .

1. The Phrase " Intergenerational sex" is used in reference to all sex between older people, who are often male, and teenagers.



ILLUSTRATIVE OPTIONS

75% of Batswana have access to basic amenities like health care and drinking water

ILLUSTRATIVE OPTIONS

CHAPTER 1

HIV AND AIDS AND HUMAN DEVELOPMENT IN BOTSWANA

"We are threatened with extinction. People are dying in chillingly high numbers. It is a crisis of first magnitude"

- Festus Mogae -
President of the Republic of Botswana

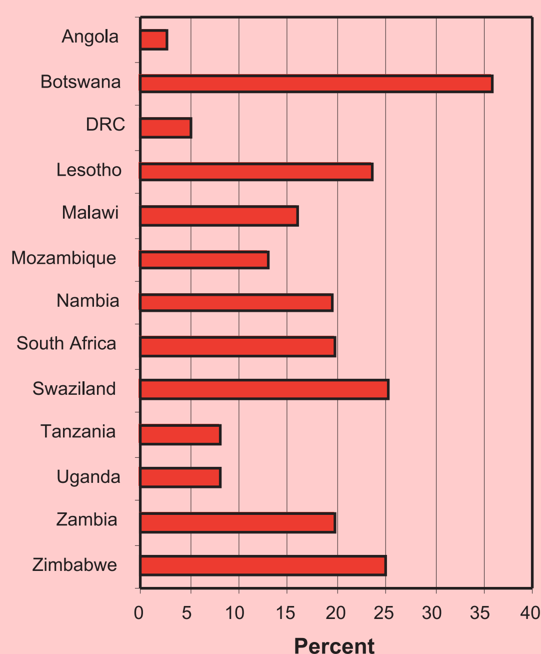
INTRODUCTION

The quest for an AIDS-Free generation should find its inspiration from these very honest words of a leader concerned about the plight of his people. President Festus Mogae has assumed personal responsibility for the leadership of the response to the HIV and AIDS epidemic in Botswana. It is a fitting response from a leader to a crisis of the nature and magnitude of the HIV and AIDS epidemic in Botswana.

With the highest reported HIV prevalence rates in the world, Botswana is at the epicentre of arguably the most devastating epidemic to hit Southern Africa in recent memory. In Botswana, HIV and AIDS are wiping out decades of impressive achievements in human development, causing untold human suffering, deepening poverty, social dislocation, and economic hardship. Health care systems are overwhelmed, the education sector looks ever more vulnerable, whilst households are increasingly being trapped in a vicious circle of disease, social and psychological trauma and poverty. Traditional coping mechanisms, on decline even before the onset of HIV and AIDS, are being stretched beyond breaking point at the community level. The epidemic is threatening to sunder the very fabric of society.

Estimates of HIV prevalence rates vary but they convey the same message: the epidemic has reached crisis proportions. According to the AIDS/STD Unit (ASU),

FIGURE 1.1
HIV PREVALENCE RATES FOR SOUTHERN AFRICA



SOURCE: UNAIDS, 2000

Ministry of Health, 28% of Botswana's sexually active population (15-49) is infected with HIV. UNAIDS puts the figure at 36%. In the absence of affordable and accessible treatment, almost all of them will die in the next decade. One in eight infants are being infected at birth. This explains the phenomenal increase in infant and child mortality rates between 1990 and 2000 (See Annex 2, Fig. A2.5). In a country with a small population of only 1.6 million people, about 85[1] persons are being infected with HIV every day.

But not all is lost. Out of every 100 Batswana of all ages, 80 do not carry the virus. Amongst those under 15 years of age, HIV prevalence rates are estimated at less than 2%. In consequence thereof, the development challenge now is to keep this part of the population free of HIV infection.

AN AIDS-FREE GENERATION IN OUR TIME

Botswana's Long-term Vision, Vision 2016, envisages a society in which there will be no new HIV infections by 2016. Grand as it may appear, this target is achievable. It will not be easy but it has to be done. Some of the strongest barriers to prevention - tradition and ignorance - may now be ready to give way after years of intermittent effort by anti-AIDS campaigners. Renewed efforts are required to turn the political will expressed by the President and his Government into a national resolve to overcome the epidemic.

The primary challenge remains breaking the cycle of the spread of HIV from one generation of Batswana to another and containing the spread of the virus within generations. If these two goals are achieved, then Botswana can expect a generation of Batswana that is substantially free of HIV and AIDS by year 2016. In this regard, Botswana's best bet is the population currently aged below 15.

If measures are put in place to keep HIV prevalence rates in this group low and declining as it ages, an AIDS-Free generation of young Batswana aged 16-31 will have been created by 2016.

To achieve this goal, the strategic focus should be on breaking the transmission of HIV from older generations to those under fifteen and protecting this cohort from the choices, activities and behaviour that have exposed older cohorts to higher risks of infection. Bold decisions; new approaches and new actors; and additional resources will be required not only to promote an AIDS-Free generation by 2016 but also to reduce prevalence rates throughout the population. The future of human development in Botswana requires no less. Immediate interventions include:

* Intensification of measures to prevent intergenerational transmission of HIV. Bold and imaginative approaches to sex education for teenagers are required. They need to be taught about the dangers of penetrative sex, the protective power of good family values, the value of abstinence and taking responsibility for their well being. They also need to be taught that they can be intimate without engaging in penetrative sex. For the sake of posterity, society should take a strong position against sex between older men - anybody over 25 - and young women under 18 and deal harshly with those who have sex with youth aged below 16.
* Preventing intra-generational transmission of HIV. Sex education still has to emphasise behavioural change and safe sex. Universal access to information and condoms has to be assured.
* Treatment and care, with a view to reducing the viral load for People Living with HIV and AIDS (PLWA) to maintain good health amongst them and to give incentives for others to get tested.
* Designing effective responses for high-risk groups. These include long distance truck drivers, long distance hawkers, commercial sex-workers, and workers in development projects, tourism and other high human mobility industries.
* Intensification of measures to control sexually transmitted diseases.
* An expanded counselling system for HIV-positive people, their families, caregivers in the home-based care programme, and health personnel.

The long-term interventions should focus on behavioural change and poverty reduction not only as responses to HIV and AIDS but also as durable responses to the broader problems of health and development.

HUMAN DEVELOPMENT, HUMAN RIGHTS AND HIV AND AIDS - A CONCEPTUAL FRAMEWORK

The UNDP Human Development Report 2000 (HDR 2000) defines human development as "... the process of enlarging people's choices by expanding human functionings and capabilities". It identifies three capabilities as the most essential at all levels of development. For an individual, these are living a long and healthy life; being knowledgeable; and having access to the resources necessary for a decent standard of living.

Defined as such, human development is a process as well as an end that reflects human outcomes in desirable functionings and capabilities.

But human development is substantially larger than the three essential capabilities discussed above. It

encompasses positive outcomes in human freedom; human security for the individual, the family unit and the community; and the full realisation of fundamental human rights. All these outcomes are essential for people to realise their potential to develop themselves, their families and their communities.

BOX 1.1

FUNCTIONINGS AND CAPABILITIES

Functionings:

According to HDR 2000, the functionings of a person are the valuable things the person can do or be. For instance, being well nourished or literate or rich are functionings – desirable things that a person can be. Similarly participating in the life of one's community and educating one's children are functionings that reflect the valuable things one can do.

Capabilities:

Capabilities represent the various combinations of functionings that a person can achieve. For instance, to live a long and healthy life, one requires several functionings. These include being nourished, having access to quality health services, and having command over some critical minimum volume of resources.

SOURCE: HUMAN DEVELOPMENT REPORT 2000

The philosophy of human development has always resonated well with Botswana's development philosophy. From the very first national development plan, four ideals - rapid economic growth, social justice, economic independence and sustained development - formed the nexus of the planning process in Botswana. Consequently, deliberate measures were taken to develop essential human capabilities - long and healthy life through investment in health; knowledge through investment in education; a decent standard of living through employment creation and social safety nets; and participation through democracy.

These efforts were richly rewarded through steady progress in the expansion of opportunities for a better life for an increasing number of Batswana. Until 1996, when HIV and AIDS became very visible through its impact on people's lives, Botswana made steady progress up the Human Development Index (HDI) rankings. These gains are now being threatened by an HIV and AIDS epidemic that has to date defied all measures of containment. Even as life expectancy at birth plummets to below 50, Botswana must fight and not surrender all her human development gains to HIV and AIDS.

HIV and AIDS and Human Poverty: The stakes rise in the fight against poverty

Until the mid-1990s, Botswana's premier human development challenge was perhaps unemployment and the eradication of poverty. In the late 1990s, HIV and AIDS, and therefore health, has become arguably the single most important development challenge in Botswana. Poverty and health are very closely linked to each other in a two-way causation relationship. Poor health very easily translates into poverty for sick people seldom earn an adequate income.

On the other hand, poverty often results in poor health. Overcrowded accommodation, poor personal hygiene, poor diets and poor sanitation increase poor people's susceptibility to infection. In fact diseases that feed on such conditions - cholera, tuberculosis and sexually transmitted diseases amongst others - are often referred to as diseases of poverty. Poverty reduction and improved health are therefore mutually beneficial pursuits.

Following the World Conferences of the 1990s, notably the 1995 World Social Summit for Social Development and the 1996 OECD-DAC strategy: Shaping the 21st Century, global optimism that the goal of eradicating poverty was within reach heightened.

The conferences of the 1990s set eradicating poverty as the new priority for development and recognised that poverty means more than inadequate income. Since then, poverty has increasingly been defined in terms of human poverty. Human poverty is the denial of choices and opportunities most basic to human development. It reflects deprivation in essential capabilities.

BOX 1. 2

THE OECD-DAC/UN/WORLD BANK POVERTY REDUCTION TARGETS

Income Poverty:

Between 1993 and 2015, the proportion of people living in extreme poverty should be halved whilst the depth of poverty should not worsen. Indicator: the proportion of people living on US$1 a day.

Relative Poverty:

The consumption of the poorest fifth of the population should be increased.

Malnutrition:

Between 1995 and 2005, the proportion of malnourished children should halve, and halve again between 2005 and 2015. The indicator for this would be the proportion of underweight children below the age of five.

Literacy:

Between 1990 and 2015, the global adult illiteracy rate should be reduced to 8%. Furthermore male and female illiteracy rates should converge at 8% by 2015.

SOURCE: UNDP POVERTY REPORT, 1998

HIV and AIDS strikes at the very core of human development. It shortens human life, erodes people's sense of dignity and self-esteem, causes social exclusion and traumatises and impoverishes individuals, families and whole communities. More of the national resources will have to be committed to the health sector at the cost of investment in human development. Productivity and economic activity decline with the spread of the epidemic. Overcoming human poverty has become a bigger challenge than it could ever have been without HIV and AIDS. The HIV and AIDS epidemic makes it an imperative of poverty reduction strategies to target human poverty indicators rather than indicators of income poverty. The challenge is on for anti-poverty initiatives to develop, or adopt, and use human poverty measures that include HIV and AIDS.

Towards the Measurement of Human Development

Human development is too complex and too rich a concept to be reduced to a single composite index. Nonetheless, significant attempts have been made to capture and measure the concept. Until 1990, GDP per capita was the dominant composite measure of development despite its obvious limitations, in particular its reduction of development to economic growth. The Human Development Index (HDI), in use since 1990 when the first Human Development Report was produced, adds two dimensions that reflect human outcomes to per capita GDP in the measurement of human development. Although it covers only three dimensions of human development, it is a useful compliment, if not alternative, to per capita GDP. It nevertheless is not comprehensive enough.

Consequently, complementary measures are used concurrently with HDI. These include the Human Poverty Index (HPI), which measures the distribution of progress in human development by focussing on human deprivation. Two gender-related measures are also used.

The Gender-related Development (GDI) considers disparities in outcomes for men and women in the same dimensions of human development that HDI covers. The Gender Empowerment Measure (GEM) looks at women's participation in the economic and political lives of their communities.

The use of the indices that complement HDI - GDI, GEM and HPI testifies to the existence of many dimensions of human development. The inclusion of per capita income in HDI attests to the importance of income and economic growth in the process of human development. But the failure of trickle down economics suggests that the outcome of economic growth could be wider income disparities rather than the reduction of poverty. Overcoming human poverty requires pro poor growth or growth with equity.

Human Development and Human Rights - A Common Motivation and a Common Purpose

Human development and human rights share a common motivation and a common purpose: to protect and promote the dignity and worth of the human person. In this vein, HDR 2000 asserts that the two are sufficiently congruent in motivation and purpose to compliment each other and yet remain sufficiently diverse to significantly enrich each other.

For an individual, the realisation of a particular right manifests itself in the enjoyment and protection of all the freedoms and opportunities associated with it. As HDR 2000 asserts, this entails a claim to the help or collaboration of other people or institutions, in particular

BOX 1.3

MEASURES OF HUMAN DEVELOPMENT

The Human Development Index (HDI)

The HDI is an average measure of a jurisdiction's achievement in the three essential dimensions of human development – a long and healthy life; knowledge; and a decent standard of living. The proxy variables used in each case are respectively, life expectancy at birth, the adult literacy rate and income per capita.

The Gender related Development Index (GDI):

The GDI measures disparities in human development outcomes for men and women in the same dimensions of human development covered by the HDI.

The Gender Empowerment Measure (GEM):

The GEM is yet another development index that explicitly examines differential outcomes for men and women. It examines women's empowerment in terms of representation in institutions of political and economic decision making.

The Human Poverty Index (HPI):

The HPI measures human poverty, which is defined as deprivation in a multiplicity of dimensions of capabilities – long and healthy life, knowledge, income and participation. The HPI is a weighted average of three variables: the percentage of people expected to die before age 40, the adult illiteracy rate and deprivation in overall economic provisioning – public and private. The proxy variable for deprivation in overall economic provisioning is a composite of the percentage of people without access to basic health services and safe water and the percentage of underweight children.

SOURCE: UNDP POVERTY REPORT 1998

the state, in ensuring individuals' access to the attendant freedoms. Thus, as a universal claim, the right to education, for instance, buttresses the knowledge capability by obliging the state to provide universal access to quality basic education and obliging parents to send their children to school.

The human rights agenda also benefits from human development. Human development, by its very nature, fulfils human rights. At a minimum, human development is measured in terms of the eradication of human poverty. This confers upon individuals a multiplicity of freedoms - amongst them freedom from want, freedom from discrimination, freedom to develop and freedom to participate - associated with the social and political rights underpinned by the Universal Declaration of Human Rights. It is also in the nature of human beings to demand 'higher' rights and freedoms as more of their basic wants are met, for human development is an empowering process. Thus, in South East Asia, economic prosperity has led to a stronger movement for political and civil rights and the right to choose. In virtually all societies, the relatively more developed sections of society have led the struggle for greater democratisation.

A recurring problem in the rights discourse is the legal enforceability of human rights. In the rights approach to human development, a distinction is made between human rights and legal rights. Legal rights are by their very nature enforceable through the court system because they derive from existing laws. Human rights on the other hand transcend the limits of legal enforceability. They exist prior to the existence of the structures of their enforcement and therefore cannot be subject to the same principles of legal enforceability that legal rights are. Whilst many of the frequently unfulfilled rights of PLWA are legal rights, many are not. This neither denies their existence nor justifies their non-fulfilment.

Human Rights and HIV and AIDS

In its long-term vision, Botswana envisages a compassionate, just and caring nation. Towards this end, HIV and AIDS require a particular focus. The challenge is not only to contain the spread of the disease but also to ensure a dignified existence - free of discrimination - for those living with HIV and AIDS. The stigma and the level of discrimination visited upon those living with HIV or AIDS in African communities is partly responsible for the limited progress so far made in containing the spread of the epidemic.

Too much of the epidemic is still underground and responses therefore continue to lack precision. A culture of respect for the rights of those affected by the disease will go someway towards helping Botswana get a clearer perspective on the epidemic and ensuring a dignified existence for those affected by the epidemic. But accurate documentation of the epidemic is hardly the compelling logic for human rights consciousness in dealing with HIV and AIDS.

It is the inalienable rights of those living with AIDS and those uninfected by the virus that make respect for human rights a compulsive option in dealing with HIV and AIDS. HIV-positive people have a right to enjoy freedom from discrimination, a right to self-esteem, dignity and to participate in all aspects of the lives of their communities. HIV-negative people also have rights including the right to stay HIV-negative. It is to the credit of Botswana that no AIDS-related murders have yet been reported. In some countries, community hostility towards infected persons condemns them to suffering in silence out of fear of victimisation, sometimes violent, and imperils the efficacy of prevention measures.

Articles 1 and 2 of the Universal Declaration of Human Rights boldly proclaim human rights everyone's birthrights. Their non-fulfilment should not be used to obscure their existence. In the case of health, the non-fulfilment of social and economic rights increases susceptibility to disease, reduces prospects for recovery amongst the ill and facilitates progression from morbidity to death. Box 1.4 (next page) flags some of the rights that are particularly relevant for a response to HIV and AIDS.

The 1998 International Guidelines on HIV and AIDS and Human Rights (issued by the United Nations High Commissioner for Human Rights and UNAIDS) emphasise the synergy between human rights and public health. They offer concrete measures that protect human rights and create a conducive environment for dealing effectively and humanely with HIV and AIDS.

These measures focus on:

* The Government's responsibility for co-ordinating and assuming accountability for a multi-sectoral HIV and AIDS response;
* Widespread reform of laws and legal support services, with an emphasis on non-discrimination, promotion of public health, and improvement of the status of women, children and marginalised groups; and
* Support for greater private sector and community participation in the response to HIV and AIDS.

HIV and AIDS - The Antitheses of Human Development

If unchecked the HIV and AIDS prevalence rates in Botswana, could result in an enormous human development crisis. Already, there is evidence of households being impoverished by HIV and AIDS. Current trends in morbidity and mortality live no doubt that life expectancy either has or will be cut by several decades from its peak value of 67 years. Unlike most other infectious diseases, AIDS kills people in their most productive years and does so very slowly, draining their savings, destroying their capacity to earn and causing severe deterioration in mental and physical wellbeing for those affected.

The human development implications of HIV and AIDS are discussed more substantively in Chapters 2 and 3 where the macroeconomic and social impacts are examined from sectoral perspectives.

GREAT ACHIEVEMENTS IN HUMAN DEVELOPMENT

From very humble beginnings in 1966, Botswana has had more than three decades of successful human

BOX 1.4

A HUMAN RIGHTS APPROACH TO HIV AND AIDS

The right to a decent standard of living:

Poverty and deprivation cause ill health, and ill health causes poverty. HIV and AIDS make the second link more graphical. Two of the more painful effects of HIV and AIDS are the emergence of a class of people recently impoverished by AIDS and populations of children who have lost their parents to the disease. Condemned to a life of poverty, these groups require the compassion of the state and the community to manage a decent standard of living.

Furthermore, in poor communities, conditions are particularly ripe for the spread of HIV. The right to development provides sufficient motivation for concerted action to improve the living conditions of the poor. When too many people share a room that is also used as a kitchen and a bathroom and household income is never adequate to meet the family's daily food requirements, HIV spreads ever more quickly. Thus, in the long term, an adequate response to HIV and AIDS should begin with reinvigorated measures to eradicate poverty and assure the right to a decent standard of living for poor people.

The right to non-discrimination:

The stigma associated with HIV and AIDS and the discrimination directed at HIV-positive people are violations of human rights. Furthermore, they enshroud the epidemic in the shame, silence and denial it thrives on. People avoid HIV-related counselling, testing, treatment and support. People hide their status and victimise those who don't or can't do likewise. An informed response to the epidemic is impossible under such circumstances.

The HIV status of people has also been used to deny HIV-Positive people their right to employment. HIV-Positive people could live productive lives for periods in excess of ten years, during which they should enjoy the same rights and freedoms as everybody else in society, including the dignity and self esteem of providing for their own material wants.

The right to information and education:

Presently, campaigns against HIV and AIDS hinge on prevention. Prevention efforts require effective information and awareness raising about safe sex, condoms and sexual relations in general. The right to information requires state and non-state actors to tailor information dissemination to meet the requirements of all sectors of society, especially the poor.

The right to health and medical services:

Halting an epidemic requires a well-functioning health system that is accessible to the population at large and capable of aiding prevention efforts, providing counselling and treatment and caring for terminally ill patients. The public health system should also protect society from opportunistic profiteers claiming to have cures and cheating HIV-Positive people off their money. It should also protect them from being used as guinea pigs in experiments, often without scientific basis, that endanger their already compromised health.

The right of those who are free of HIV to remain so is also very important. Individuals have been known to deliberately spread the HIV virus through unprotected consensual sex when they know they are HIV-Positive, through rape and needle pricking. Extra ordinary measures need to be taken to protect health care professionals and care givers at home from infection from patients and ensure that the health care system does not aid the spread of HIV through negligence.

The right to share in scientific advances:

A contentious issue in the anti HIV and AIDS campaign is the unequal access to new AIDS medicines and treatment. Drugs exist that can prolong and improve the lives of people living with HIV and AIDS. But they are exorbitantly expensive, primarily because of the patent rents pharmaceutical companies insist on collecting on these drugs. The success of Brazil in reducing the cost of anti-retroviral drugs and guaranteeing access for all HIV-Positive people through mass production of patented drugs illustrates graphically the need to enact laws that ensure that the public good overrides patent protection of innovations in specific instances.

Women's rights:

Gender inequality aids the spread of HIV. It reduces women's control over their lives and increases their vulnerability to HIV infection. They are often unable to refuse sex without a condom or with a partner who they know, or suspect, engages in high-risk behaviour. Poverty forces many into various forms of sex work. This systemic gender inequality is a crucial factor in the spread of HIV and AIDS. Educating women on their rights within relationships should continue with added vigour.

development, underpinned by unrivalled political and economic stability, rapid economic growth and strong investment in health, education and human welfare. These gains are now in danger of being obliterated by an HIV and AIDS epidemic that has so far defied response measures. Life expectancy could return to pre-independence levels whilst progress in poverty reduction could be reversed. A summary of some of Botswana's key human development achievements to date is given below.

* Income poverty rates fell from 59% in 1986 to 47% in 1994.
* Real per capita income increased about tenfold from about $US300 in 1966 to US$3,300 in 1999.
* The primary school enrolment rate soared from 50% in 1966 to 97% in 1999.
* Adult literacy rates improved from 41% in 1970 to over 79% in 1999.
* The mortality rate of children under the age of five dropped sharply from 151 per 1,000 live births in 1971 to 56 in 1991.
* The infant mortality rate fell from 108 deaths per thousand live births in 1966 to 38 in 1999.
* Malnutrition among children under the age of five declined from 25% in 1978 to less than 13% in 1996.

ILLUSTRATIVE OPTIONS

Making rapid strides in infrastructure development

BOX 1.5

STRONG STATE AND SUCCESSFUL HUMAN DEVELOPMENT

Botswana's progress in human development is the result of a deliberate government strategy for development that recognised the structural defects of the economy – a narrow economic base, essentially diamonds; a small, poor and largely unskilled population; and under developed markets amongst others – and in consequence depended on a strong developmental role for the state. The strategy was simple: mineral revenue would be used to develop infrastructure, diversify the economy and develop essential human capabilities. The main thrusts of this strategy were:

* Education and health as long-term responses to poverty and joblessness.
* Employment creation based on generous government subsidy support: The Financial Assistance Policy (FAP) and the Micro Credit and Credit Guarantee schemes are presently the main incentive programmes but they follow on a long list of others, some in agriculture.
* Aggressive pursuit of foreign direct investment, based on credible and enforceable property rights, low rates of taxation a liberal regulatory framework for business and the Financial Assistance Policy.
* Rural development: This entailed extension of basic services to rural areas and incentives for agriculture and business.
* Social safety nets for economically vulnerable groups: elderly people, people with disabilities and people who are destitute.

* A system of social safety nets guarantees destitute persons, people with disability, orphans and old people (65 and above) a minimum monthly income.
* Access to quality basic health services and portable water, at more than 75% of the population for both, is excellent.
* Significant advances in governance and human rights have been made. Botswana is a democracy with a progressive constitution that bars unfair discrimination.
* On human rights, the Government has openly pursued a policy of ending discrimination against women and has put in place a

programme aimed at eliminating gender-based discrimination.

* Presently, a Presidential Commission is reviewing three sections of the Constitution of Botswana to determine whether they are tribally neutral and make appropriate recommendations to the President.

* More women than ever before now hold decision-making positions in the Government and in business. The number of women parliamentarians rose from 5% in 1987 to 10% in 1995 and 19.4% in 1999. Women comprise 24% of President Mogae's cabinet, three of them as full cabinet ministers. The professional and managerial cadres in both the public and private sectors are increasingly more welcoming to women.

Botswana's development success was driven by good macroeconomic management, which recognised the need for a strong state in the development context of Botswana; a human development centred public expenditure programme that put education, health and social welfare at the centre of the development agenda; and healthy Government revenues. Despite progress so far made, many of the challenges that Botswana faced at independence remain relevant, albeit in a somewhat diminished form.

Unemployment is estimated at about 20% of the population whilst about half the population is income poor[2]. Inequalities in income and wealth are high, with distinct gender and geographical dimensions. Poverty is predominantly a rural problem and is especially severe in the Ghanzi, Kgalagadi and Ngamiland districts. Survey results show that income distribution is very skewed, with the poorest 40% receiving 12% of total national income in 1994 compared to 59% for the richest 20%. Women experience higher rates of income poverty (50%) compared to men (40%).

The advent of HIV and AIDS further complicates Botswana's development challenge. Poverty, unemployment and inequality are in part problems of Botswana's limited absorptive capacity and the size and spatial distribution of the population. At 1.6 million, the population cannot create sufficient absorptive capacity for domestic production. In many rural settlements, consumer populations are too small to sustain business on a scale that could make an impact on unemployment and poverty.

HIV and AIDS enters the development equation as both a cause and a consequence of poverty, unemployment and inequality and invariably draws resources away from other priority areas, including poverty and inequality.

THE DEVASTATION OF HIV AND AIDS

HIV has spread very quickly throughout Botswana since the first reported AIDS case in 1985. Fifteen years from hence, the HIV prevalence rate in Botswana amongst 15-49 year olds is estimated at 28-36%. Thus, without adequate treatment and care, a third of Botswana's adult population could be dead in 8-12 years. Meanwhile, more people are being infected with HIV each day.

Young people are especially hard-hit by the epidemic. UNICEF reports that Botswana has the highest proportion of 15-24 year-olds living with HIV and AIDS in the world. As Table 1.1 shows, girls and young women are especially vulnerable to HIV infection - not only in Botswana, but throughout the Southern African region.

TABLE 1.1
PERCENTAGE OF 15-24 YEAR OLDS LIVING WITH HIV AND AIDS IN THE SOUTHERN AFRICAN REGION

	FEMALE	MALE
BOTSWANA	34	16
LESOTHO	26	12
SOUTH AFRICA	25	11
ZIMBABWE	25	11
NAMIBIA	20	9.1
ZAMBIA	18	8.2
MALAWI	15	7.0
MOZAMBIQUE	15	6.7
CENTRAL AFRICAN REP.	14	6.9
KENYA	13	6.4

SOURCE: UNICEF, THE PROGRESS OF NATIONS 2000

High HIV prevalence rates and the attendant rise in morbidity and mortality has caused Botswana to slip 51 places down the Human Development Index rankings of 174 nations from an impressive 71 in 1996 to 122 in 1999 and 2000. It has also slashed years off life expectancy. Estimates of the likely effect on longevity vary. The most pessimistic yet, UNAIDS and US Bureau of Census estimates, suggest that life expectancy in Botswana could drop to 29 years by the year 2010.

Whatever the effect of HIV and AIDS on longevity turns out to be, the impact on the wellbeing and prosperity of Batswana would be devastating. The challenge for Botswana is to respond with resolution and stay on course

ILLUSTRATIVE OPTIONS

Ownership of cattle is highly uneven

towards the Vision 2016 target: no new HIV infections by 2016. Therein lies Botswana's hope for an HIV and AIDS-Free generation.

What follows is a sectoral analysis of the likely impact of HIV and AIDS in Botswana. The underlying message is that HIV and AIDS has a negative impact on human development. It reduces incomes and aggravates poverty and inequality.

1. Poverty and Income Inequality

Poverty is both a cause and a consequence of ill health. Thus poverty and HIV and AIDS tend to be mutually reinforcing realities. Botswana has both a high HIV prevalence rate and high rates of poverty (about 47% of its people live below the poverty datum line). Research shows that the HIV and AIDS epidemic will cause a sharp deterioration in incomes and asserts for affected households and deepen human poverty. The reasons are fairly straightforward. HIV and AIDS kills able-bodied persons; working people who support scores of dependants - children and elderly parents who often do not have secure alternative sources of income.

But the correlation between poverty and the risk of HIV infection is not automatic. In Botswana (as in some neighbouring countries), middle and higher-income earning males appear to be at particular risk. It could well be that income inequality is as important (though generally overlooked) an indicator of risk as poverty. Nonetheless, the HIV experiences of poor and rich households are different.

BOX 1.6

SOME PATTERNS OF INEQUALITY

- Poverty levels are worse in rural than in urban areas. It is estimated that in 1993, 55% of rural Batswana were living in income poverty, against 46% in urban villages and 29% in urban areas.
- Poverty rates in Botswana also betray gender disparities. Some 50% of female-headed households live below the income poverty line, compared to 44% of male-headed households.
- Cattle ownership is uneven. Among traditional farming households, 47% have no cattle, and 24% have fewer than 11. While 71% of such farming households own only eight per cent of the total traditional herd, the wealthiest one per cent own roughly 25% of the herd, and the wealthiest 2.5% of farming households own 40%.
- Cattle ownership is especially gender-biased. About 66% of all female farmers have no cattle, compared to 33% for male farmers. The average number of cattle owned by female farmers is six, compared to 20 for male farmers.

BHDR, 1997

HIV and AIDS reduces household capacity to earn, drains lifetime savings through rising medical expenditure and in consequence causes deterioration in the quantity and quality of household food supplies. Families who are well off and depend less on wage income have relatively stronger buffers against such effects, and are more likely to retain or recover their standard of living. On the contrary and as Des Cohen observes,

"... poor households never recover even their initial level of living as their capacity is reduced through the loss of productive family members through death and through migration, and through the sales of any productive assets they once possessed.."

HIV and AIDS can therefore be expected to cause deepening poverty and more unequal income and wealth distributions.

2. *The Impact of HIV and AIDS on Households*

A large proportion of households in Botswana will lose at least one member through AIDS. If HIV infections occurred at random throughout the population, about half of all households in Botswana would contain at least one HIV-positive member. But then, HIV infection tends to cluster, affecting some households more than others. Even so, the household impact of HIV and AIDS will be very widespread.

The immediate costs of HIV and AIDS to a household include increased expenditures on health and loss of income as sick breadwinners retire early from work and other fit to work family members devote more of their time to giving care to the sick. Households may also draw down their savings, dispose of their assets and incur debt to finance rising expenditures due to rising health costs and to bury relatives who die. Other costs are not readily quantifiable. Foremost among these are the trauma and grief associated with caring for a patient who wastes away very slowly and eventually dies.

HIV and AIDS will also reduce the educational and employment opportunities for children from affected households and reduce household labour, which could have far reaching implications for food security among poor and farming households. Because deaths from AIDS related causes will in the main be in the income-earning age group of 25-50, the epidemic is certain to cause an increase in household dependency ratios.

A study on the economic impact of HIV and AIDS estimates that on average every two income earners will have to take care of about one extra dependent and that in poorer households as many as four extra dependants will rely on each income-earner. Some of the findings of the impact study are summarised in Box 1.7.

BOX 1.7

HOUSEHOLD IMPACTS OF HIV AND AIDS

- An 8% fall in national household-level per-capita income;
- An increase of 5% in the number of people living in poor households;
- Significantly higher income dependency ratios for the poorest households – every income earner in this category can expect an extra 4 dependants as a result of HIV and AIDS;
- A drop of 13% in the per-capita household income for the poorest quarter of households.

SOURCE: MACROECONOMIC IMPACT STUDY: GOVERNMENT OF BOTSWANA 2000

It would seem therefore, that current HIV prevalence rates imply increasingly difficult conditions for Botswana's households: rising expenditures when household incomes are falling and severe trauma from the sickness and death of close relatives. Household coping mechanisms especially the extended family, may fail to mitigate these effects.

3. *A Rising Orphan Population*

One of the social impacts of HIV and AIDS will be an increase in the number of orphans coming from households in which the mother or both parents have died of AIDS. The size of Botswana's orphan population is unknown at present. There is however, an ongoing effort to register all orphans. Model projections from Government sources indicate however, that the orphan population could rise to between 159,000 and 214,000 by 2010 and will constitute more than 20% of all children in Botswana.

The capacity of the extended family to absorb these orphans will be stretched to the limit and may even collapse when the current generation of grandparents dies. Already there is evidence that people in the age group 20-45 are reluctant to take orphans, mainly for socio-economic reasons .

The Government and the NGO sector will have to assume most of the responsibility of caring for orphans. In fact, the Government of Botswana already runs a shared responsibility orphan care programme that provides food supplements to families that register orphans under their care. A food basket worth BWP216 per month, about US$50, is availed for every registered orphan. Logistically, the measure will not prove easy to implement because pride, the stigma of HIV and AIDS and a sense of duty to orphans prevents many households that need help from registering orphans under their care.

Food distribution centre for orphans in Mochudi, Kgatleng Distrct

That such a programme is already in place is commendable. It confirms a healthy sensitivity to the plight of Botswana's orphans. But the state alone cannot succeed in providing quality care for all orphans. Community and NGO support would be required on an unprecedented scale.

4. *The Economic Impact*

There is an appreciation in the Government and the private sector of the inevitability of far reaching consequences of HIV and AIDS for the economy, coming primarily through the labour impact and business perception of investment risk. Both the Government and business will suffer increasing labour costs as absenteeism, morbidity and death reduce productivity, and labour training and replacement costs rise on account of higher rates of worker turnover. Poor employee health will also exert upward pressure on health and social security expenditures. These conditions are not supportive of good economic performance because they depress returns on investment. For the Government, high mortality amongst workers and a shortage of critical skills could cripple governance.

At the macro level, economic growth, savings and investment, exports, the Government budget and employment would be adversely affected as economic

TABLE 1.2:
SUMMARY OF ECONOMIC IMPACT OF HIV AND AIDS IN BOTSWANA

LEVEL OF IMPACT	EXPECTED IMPACT
INDIVIDUAL	LOSS OF INCOME, HIGHER EXPENDITURE
HOUSEHOLD	LOSS OF INCOME, HIGHER EXPENDITURE
POVERTY	INCREASED POVERTY
GOVERNMENT BUDGET	LOWER REVENUE, HIGHER EXPENDITURE
PRIVATE SECTOR FIRMS	HIGHER PERSONNEL COSTS, MARKET LOSS
MACRO-ECONOMY	SLOWER GROWTH, LOWER UNEMPLOYMENT

SOURCE: MACROECONOMIC IMPACT STUDY: GOVERNMENT OF BOTSWANA 2000

ILLUSTRATIVE OPTIONS

Botswana is likely to face skilled labour shortage

agriculture may suffer extensive output shrinkage because of the relatively higher exposure to HIV infection amongst workers in the sector.

Expectedly, these findings suggest that HIV and AIDS would have profound implications for human development in Botswana. The epidemic will increase the extent of poverty and human suffering and weaken the Government's capacity to deliver essential services and sustain human development. The return on efforts to promote foreign direct investment and create jobs for Batswana may diminish.

agents here and abroad react to the epidemic. A 2000 Government of Botswana study on the Macroeconomic Impact of HIV and AIDS predicted that over the 25 year period to 2021, the growth rate of Gross Domestic Product (GDP) would fall by 1.5% and that after 25 years (1996-2021), GDP would be 24-38% less than what it would have been without HIV and AIDS.

* Whilst unemployment may decline by 8% compared to the without HIV and AIDS scenario, skilled labour shortages will worsen, raise skilled labour costs and increase dependence on imported labour skills.
* Government expenditure will rise by between 7% and 18%, mainly because of very high increases in health and social welfare expenditures, whilst Government revenue will shrink by about 10%.
* Investor confidence may fall and production techniques would become more capital intensive. The capital output ratio could rise by 18%.

In broad terms, these projections are consistent with outcomes of qualitative assessments that suggest that HIV and AIDS will distort economies in sub-Saharan Africa on a massive scale. Evidence from Zimbabwe, Burkina Faso, Côte d'Ivoire and Tanzania suggests that

It should be emphasised that slow progress and even decline in some areas of the economy does not imply the economy's lack of viability. Even though under siege from HIV and AIDS, Botswana is less of an investment risk than many emerging markets. Indeed there has been no discernible impact of HIV and AIDS on foreign investment.

5. The Impact on the Health Sector

The health care system in Botswana is already finding it difficult to cope with the HIV and AIDS epidemic. A large proportion of its resources is devoted to the care of AIDS patients. The sector increasingly emphasises home

BOX 1.8

THE STRAIN ON HOSPITALS

This year we installed extra beds as a permanent feature, recognising that we could not keep patient numbers down to the 36 planned and provided for in each of the male and female medical wards. We installed 10 extra beds in each ward. Even this has not been enough to cope all the time ... Of course the HIV and AIDS epidemic is the cause of the heavy workload and there is no hope of this abating in the near future.

The resultant overcrowding is obvious and the ease with which cross-infection can occur from patient to patient is worrying. From what is known about TB transmission we can say that it is very likely that some patients may actually get TB infection in hospital ... We simply do not have the space to perform effective isolation of TB suspects from other patients.

The in-patient workload will continue to increase for some years yet, even if home-based care functions effectively, and the current facilities will not be able to cope with the demands.

SOURCE: NYANGABGWE HOSPITAL MEDICAL DEPARTMENT ANNUAL REPORT, 1999

based care for AIDS patients to reduce pressure on hospital facilities.

The number of hospital admissions in Botswana doubled in the period 1990 to1996. At the same time, as Fig. 1.2 shows, there was a discernible upsurge in the number of in-patients dying from tuberculosis (TB), one of the opportunistic infections associated with HIV and AIDS. This link is explained in detail in Annex 3.

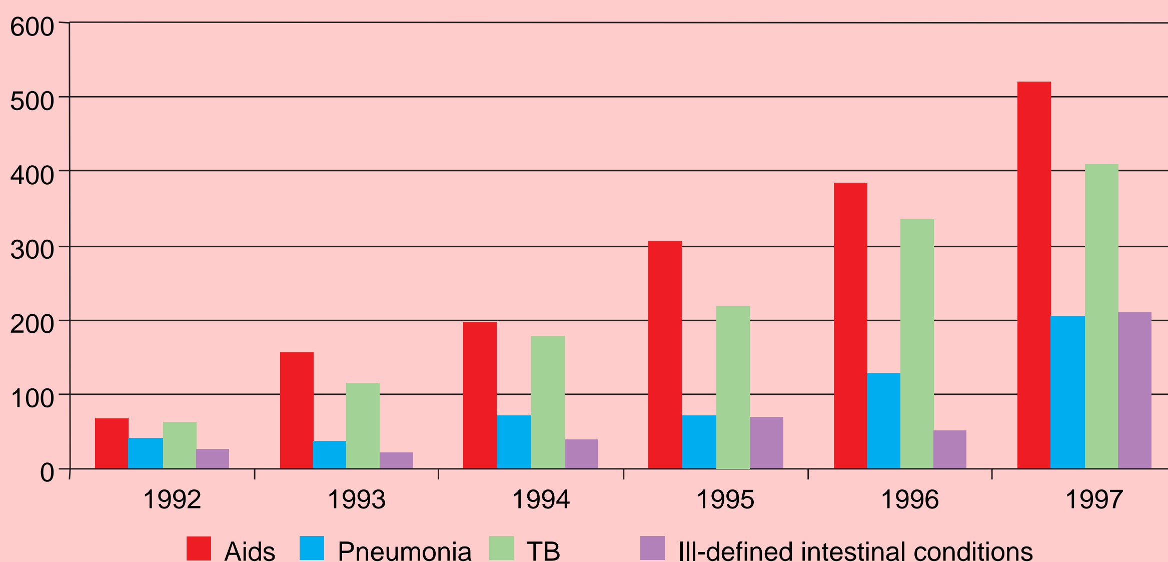
TB contributed 13% of all hospital deaths and 5.3% of all hospital discharges in 1996. In 1997, TB was the third most common diagnosis among admitted AIDS patients (10%) and also the leading cause of hospitalisation.

Fig. 1.2 shows that the hospital system has had to cope with an increasing number of hospital deaths for people aged 15-44 who die of AIDS. Confirmed AIDS deaths rose from 2.4% to 9% of total deaths in this age group between 1992 and 1997. Meanwhile, deaths as a percentage of discharges have risen markedly - by more than 10% each year since 1987. An especially sharp rise is visible from 1994 onward, as Fig. 1.3 shows. There can be no doubt that these trends are due to HIV and AIDS.

A recent survey of 20 Botswana hospitals revealed some of the chronic problems confronting health services in the country. At least one in two patients in most hospital

FIGURE 1.2:

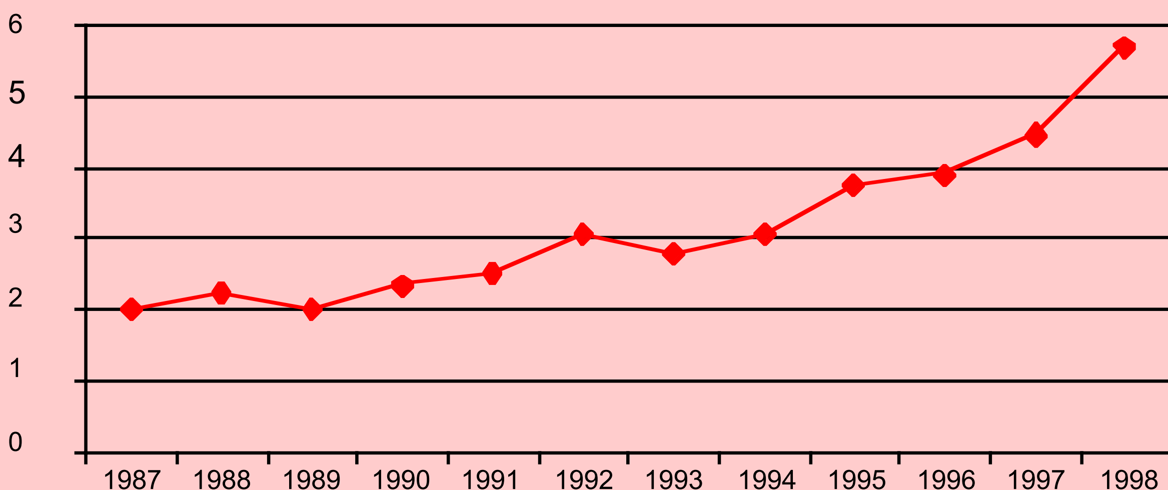
TRENDS IN IN-PATIENT DEATHS AGES 15-44



SOURCE: ABT ASSOCIATES, 2000

FIGURE 1.3:

DEATHS AS A PERCENTAGE OF ALL HOSPITAL DISCHARGES



SOURCE: ABT ASSOCIATES, 2000

wards had an HIV-related condition. In several hospitals, up to 80% of patients in some wards and more than 30% of paediatric patients had HIV-related conditions.

Long hospital stays were also cited as a problem. Staff shortages have become a constant problem, along with staff “burn-out”. Up to 30% more time is being spent diagnosing and investigating cases that have grown more complex as the epidemic intensifies. Demands for counselling have increased, while hospital expenses on drugs, linen, blood, and HIV and other tests have risen by up to 40%. If these trends continue unabated, AIDS could well overwhelm Botswana’s health system.

The health system may also suffer on the supply side. In addition to being affected as part of the general population, health care professionals are faced with the challenge of providing care to patients that are predominantly very sick. It is an environment of sickness and death that threatens to become too much even for trained professionals. Already, there are reports of high levels of stress and resignations amongst public health employees who either join private practice or emigrate.

6. The Impact on Education

The impact of HIV and AIDS is already being felt in Botswana’s formal education system. Three windows of impact - learning conditions, teaching and output - are critical for an evaluation of the impact of HIV and AIDS on education.

Learning

Current HIV and AIDS prevalence rates and the high incidences of morbidity and mortality suggest that HIV and AIDS is already part of the everyday experience of many school-going children. They have seen close relatives - parents, brothers, sisters, aunts and uncles - suffer and die of AIDS. Pupils have seen teachers fall sick and die. These experiences impact negatively on a pupil’s readiness to learn and ultimately on their performance.

The death of a guardian may force a child to adjust to an inferior standard of living. Depending on their age and life experiences, they experience the insecurity, experienced by many in the adult population, of knowing that they have engaged in behaviour that put them at risk of HIV infection. The trauma that these experiences imply will be reflected in poor classroom performance.

In secondary and tertiary institutions, students are already dying of AIDS. Amongst those who are HIV-positive, the onset of early symptoms of AIDS - frequent bouts of ill-health - disrupts learning, leading to poor results or early withdrawal from school. More school age children may in the future have to take care of sick relatives or siblings. Such responsibilities have forced many children to drop out of school. AIDS-related illnesses eat into family budgets, making it more difficult to pay school fees and transport costs to and from school.

ILLUSTRATIVE OPTIONS

HIV and AIDS will impact negatively on students’ performance

Teaching

Studies in Zambia, Central African Republic and Cote d'Ivoire show that the ranks of teachers have been severely depleted by the AIDS epidemic. In Botswana, a rising death rate among teachers has already been observed. Statistics from the Primary Education Department show that 84 primary school teachers died in 1999 - compared to eight in 1994. This represents a 60% annual increase in mortality among teachers over the period 1994-1999. The causes of these deaths are not reported. But the health risk profile for this age group suggests that AIDS could account for most of them.

TABLE 1.3

DEATH RATES OF PRIMARY SCHOOL TEACHERS

YEAR	NO. DEAD	TOTAL NO. OF TEACHERS	DEATHS PER 1000
1994	8	11 731	0.7
1995	35	10 791	3.2
1996	57	12 782	4.5
1997	64	11 354	5.6
1998	80	11 538	6.9
1999	84	11 871	7.1

SOURCE: PRIMARY EDUCATION DEPARTMENT 1999

Compared to other Southern African countries, the teacher mortality rate in Botswana is still low. For instance, in Zambia the rate is reported at 4% per year (40 per 1000) - or between four and five teachers a day. The same death rate has been reported for Swaziland. Sharp increases in mortality rates for secondary school teachers aged 25-39 (see Fig. 1.4), especially female teachers, betray the effect of HIV and AIDS among secondary school teachers.

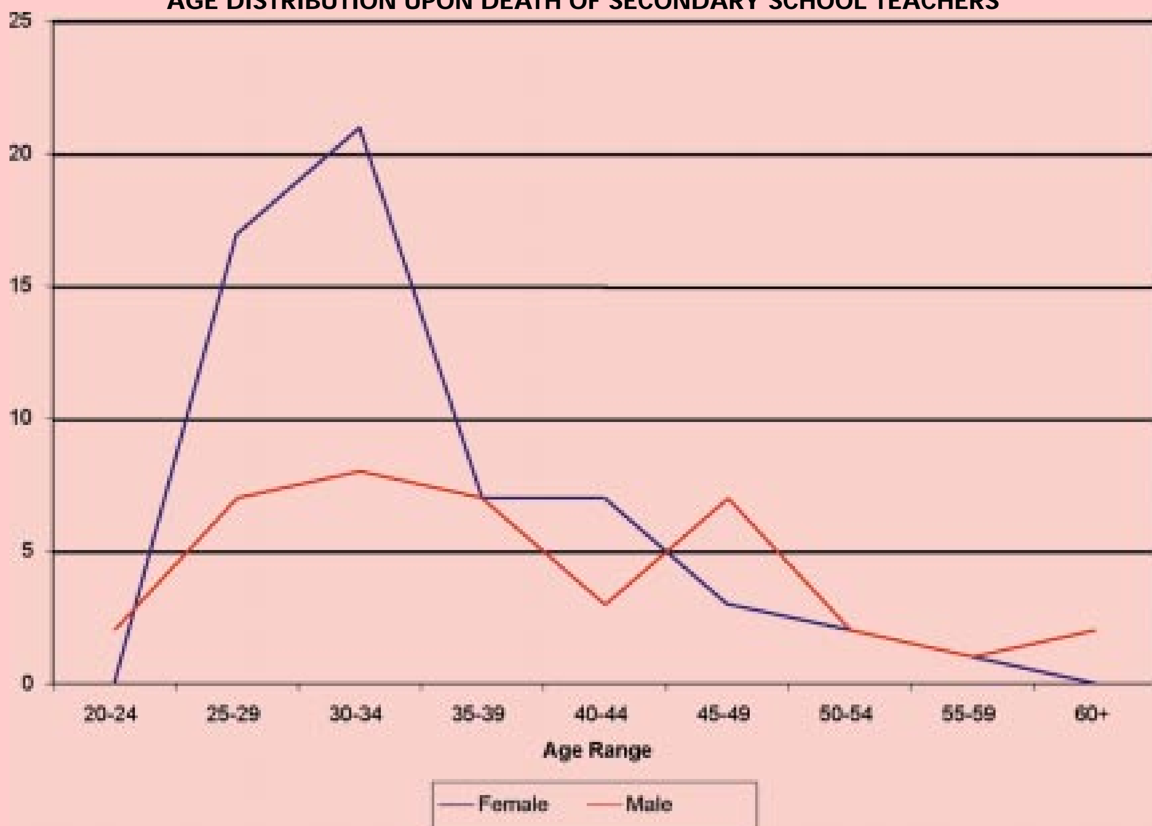
The impact on teaching does not come only through the death of teachers but also through poor quality instruction as a result of poor health. Frequent bouts of sickness take away many person hours from classroom activity whilst the stress of sickness and impending death reduce the quality of preparation and delivery.

Output

Unprotected sex occurs in Botswana's secondary and tertiary institutions of learning. Although the precise level of HIV prevalence rates among University of Botswana students is not known, a recent study revealed that one in 10 visits to the university clinic was prompted by a sexually

FIGURE 1.4

AGE DISTRIBUTION UPON DEATH OF SECONDARY SCHOOL TEACHERS



SOURCE: SECONDARY DEPARTMENT, (2000) INFINIUM HUMAN RESOURCES RECORDS - DEPT. OF SECONDARY EDUCATION DATABASE (BASED ON DATA GATHERED FROM 3RD MAY, 1999 TO 2ND FEBRUARY, 2000).

transmitted disease. The same study revealed that about 37% of students who presented with clinically suspicious signs of AIDS over the study period tested positive for HIV infection. While the level of HIV and AIDS awareness was found to be high among students many were nevertheless engaging in high-risk behaviour.

The University of Botswana and other tertiary institutions provide the tail end output of Botswana's education system. Given the high HIV and AIDS prevalence rates among 20-29 year olds in Botswana - the age group of most graduates - it is likely that Botswana will suffer a major loss of newly developed human resources, with adverse consequences for economic and social development in the future.

No part of Botswana's economy will be insulated from the effects of HIV and AIDS. From households to firms and Government, there would be dire consequences. But, as the report so often emphasises, there is hope. Most of Uganda's success in economic reform came at the height of the HIV and AIDS epidemic. A multi-sectoral approach, involving all stakeholders, is an imperative. Fortunately, Botswana is already in action on that front.

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1 Actuarial model estimate by BIDPA

2 Poverty was last measured in 1997 using 1993/94 data. Until the results of the 2001 Population Census are out, this is the most up to date measure of poverty in Botswana.

Chapter 2

DYNAMICS OF THE HIV & AIDS EPIDEMIC IN BOTSWANA

"There is a major challenge to halt or reverse the rising incidence of the HIV virus, particularly amongst young people, if Botswana is to advance in the next 20 years and beyond"

- Long Term Vision for Botswana, pp 24-25 -

Achieving the Vision 2016 target of no new HIV infections by Year 2016 and the strategic goal of an AIDS-Free generation requires bold, innovative, well managed and well resourced policies and strategies. These in turn require an understanding of the factors that drive and sustain the HIV and AIDS epidemic. Only then can the requisite policies, strategies and actions be developed. Such an exercise begins with the understanding that the magnitude and patterns of an epidemic of this type depend fundamentally on at least three factors:

i) The biological characteristics of HIV:

This information is essential for understanding the pathogenesis and infectiousness of the virus, which in turn influence its spread through a community. In Southern Africa, the dominant strain of the virus is HIV 1. To date, nine different sub types of HIV-1 have been found in the region but the dominant HIV-1 sub-type in Botswana is sub-type C.

ii) The quality and reach of interventions:

As the saying goes "Prevention is better than cure". In the case of HIV and AIDS, cure is not even an option. Treatment and care for people living with HIV and AIDS are crucial and dare not be neglected. But faced with a killer virus that visits untold misery upon society on a scale the country has not seen in recent memory, the ultimate objective of every family is to have none of their own infected by the virus. To this end, the requisite responses should be strong and relevant in content and reach the people.

Prevention measures work best when they are comprehensive but also sensitive to the needs of particular groups in society. Poor people, commercial sex workers, prisoners and gay and lesbian people for instance, require the understanding and compassion of policy makers and society, not judgement, blame, ridicule and marginalisation. Impact is a function of how operable particular interventions are in given circumstances

iii) The social context, behavioural and attitudinal factors:

HIV and AIDS feed on deficiencies in the choices made by individuals, households, communities and leaders at all levels regarding sexuality and responses to the epidemic. These choices occur in complex political, social and economic contexts. They are shaped by poverty and deprivation; unequal social relations; income inequality; the dynamics of the family unit and social structures; migration; religion; cultural value systems and sheer ignorance.

Two examples are worth flashing out. The condom, an effective preventive measure for those who choose not to abstain from sex, is still rejected by some religious denominations. Cultural purity and bureaucratic legalese continue to deny homosexuals protection from HIV and AIDS. Officialdom is hamstrung from preventive action by the denial that rape and consensual sex occur behind prison walls.

Because these contextual variables do not behave consistently across time and space, we should beware of flippantly drawing general conclusions from specific situations. Neither should the reverse be done. Nonetheless, when clear trends are visible elsewhere in the region, it is suggested that they be regarded as tenable assumptions in Botswana until disproved by Botswana-specific research. Indeed one of the reasons for the high HIV and AIDS prevalence rates in Southern Africa is that Southern African countries did not draw lessons from East Africa's early experience with HIV and AIDS and therefore responded later than they should have.

MANY EPIDEMICS IN ONE

While we tend to speak of a Botswana HIV and AIDS epidemic, there are in fact several small epidemics that are propelled by different combinations of factors. For this reason, it is essential that national-level principles, policies and strategies be developed with an allowance for fine-tuning at the local level. The city of Gaborone for instance, may require a mix of interventions that differs from that required in the Ngamiland district, precisely because the social, cultural, economic and knowledge contexts are different.

The time lag between HIV infection and the onset of AIDS also divides the HIV and AIDS epidemic into two distinct epidemics with very different impacts.

The HIV epidemic is a phase in the HIV and AIDS continuum in which large numbers of people are infected with the virus. In Botswana and other African communities, the majority of these have tended to seek refuge in oblivion about their HIV status. The few who get tested do experience trauma and in some cases rejection, exclusion and discrimination but on average, people look healthy and society is not subjected to the level of pain and psychological distress associated with AIDS.

The AIDS epidemic usually comes some eight to ten years after the HIV epidemic and is characterised by high morbidity and death. When it does emerge, society looks visibly sick and is faced with enormous challenges at all levels, with the family, the community and the nation visibly traumatised.

Facing up to the challenge of HIV and AIDS requires openness about HIV and AIDS and unity of purpose in addressing it. It requires incentives for people to know their status and bringing infected and uninfected people together to respond effectively to the epidemic. It requires responsibility at all levels. People living with HIV and AIDS have a responsibility not to pass the virus onto others. Those who are HIV-negative have a responsibility to themselves, their families and society to stay HIV-negative. These are enormous responsibilities. Government institutions, employers, civil society organisations and family units have a duty to support individuals and help them know their HIV status, because without this knowledge, their capacity to discharge their responsibilities is impaired.

Expanding the range and quality of services available to HIV-positive people and breaking down the stigma associated with HIV and AIDS will go some way towards bringing the HIV and AIDS epidemics into the open. Only then can response measures be better targeted and more relevant. But getting to such a situation requires an intimate understanding of the forces behind the spread of HIV and AIDS. Research in Botswana and other African countries points towards the same set of factors propelling the epidemic.

1. Gender Inequality, HIV and AIDS

The overall ratio of male to female HIV and AIDS cases in Botswana is roughly 1:1. The pattern is indicative of a predominant heterosexual mode of transmission. This is the reality of the epidemic on the African continent. It however conceals deep-seated unequal gender relations that sustain the epidemic within and across generations. These gender disparities are manifest, amongst others, in exploitative sexual relationships between adult males and teenagers – the sugar daddy syndrome; the misuse of power and money in sexual relations; rape and other forms of violence against women; and unequal outcomes for boys and girls in school. Decisive action on these and other factors could slow down and reverse the epidemic faster.

Young, female and vulnerable

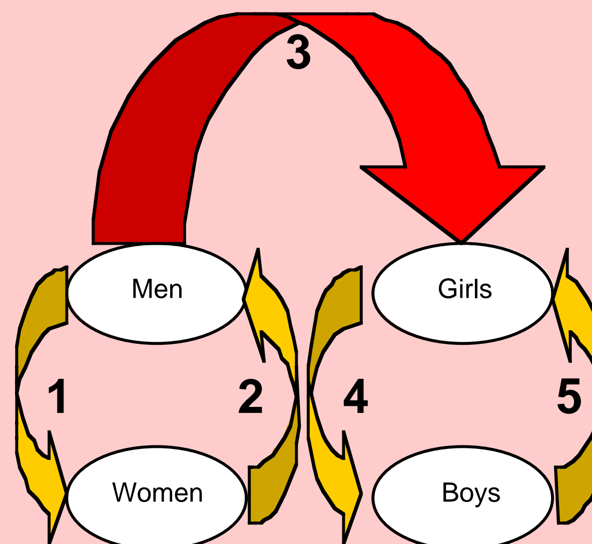
Botswana data on HIV and AIDS suggests that girls are more susceptible to HIV infection than boys. For every HIV -positive boy under the age of 14, there are two HIV-positive girls of the same age. The ratio then rises to 1:3 in the group aged 15-29 before converging towards 1:1 in older age groups. As Fig. 2.1 shows, this feature of the epidemic is not unique to Botswana. Similar findings were made in Zambia, where, amongst 14 year olds, three HIV-positive girls were found for every HIV-positive boy; and

Kenya where boys aged 15 and 16 had zero HIV prevalence rates compared to 8.3% and 17.9% for girls aged 15 and 16 respectively. Without exception, HIV prevalence rates for males and females converge in older age categories.

These figures suggest that for many girls, the first experience in penetrative sex, and therefore exposure to sexually transmitted infections, including HIV, is shared with an older and experienced man. Subsequent involvement with boys their own age provides the medium through which the virus moves from one generation to another.

Breaking 'sex link 3' in Fig. 2.1, eliminating risky behaviour in all sexual interactions and securing blood supplies is Botswana's best bet for an AIDS-Free generation.

FIGURE 2.1
INTERGENERATIONAL TRANSMISSION OF HIV — THE SEX LINKS



The Arrows indicate the direction of sexual relationships

Each outcome may require its own unique set of interventions. Tougher sentences for sex - related offences, particularly defilement; stronger enforcement of laws protecting women and children; social mobilisation against sex between older men and young girls and a return to tough social sanctions for moral impropriety are good areas to start with. But why do young women get involved with much older men and under what conditions?

The biological explanation would be that sexual maturity comes a few years earlier for girls than it does for boys. But the fundamental reason for pervasive intergenerational sex has less to do with early sexual maturity for girls and more to do with exploitation of their vulnerability and naivete by adult males and a general decline in family values.

Because girls enter into relationships with older men relatively ignorant and submissive rather than as equal partners, they are unable to discharge to themselves and their families the responsibilities associated with sex. In Community Junior Secondary Schools, pregnancy related dropout rates remain too high, suggesting high incidences of unprotected sex. In the era of HIV and AIDS, young girls may also become victims of rational even if unfair choices by older men. To minimise their own risk of infection, older men – even if oblivious of their own HIV status – may opt for sexual partners in a low risk group and young sexually inexperienced girls become their targets. In some instances, it is just pure preference. In others it is rape.

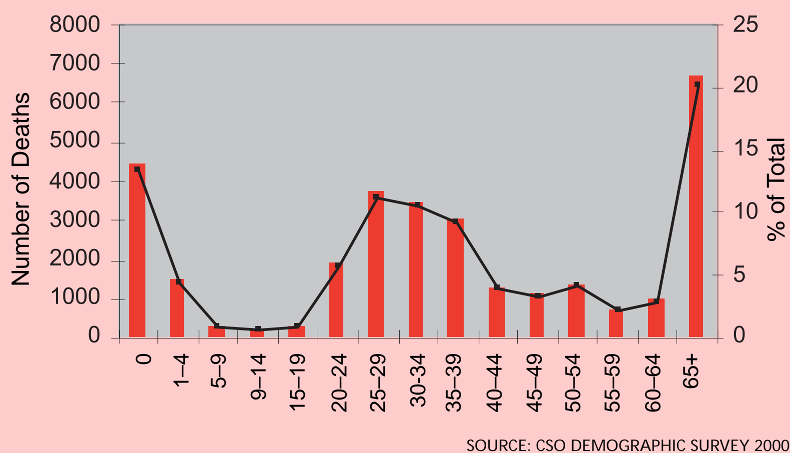
BOX 2.1.
GIRLS BEAR THE BRUNT OF HIV AND AIDS

Community based HIV sero-surveys in several African countries show that girls face higher risks of infection. In Ndola, Zambia, females age 14 were four times more likely to test HIV-Positive than males of the same age. In Kisumu district of Kenya, boys were HIV negative at age 16 whereas the HIV prevalence rate for 15-year-old girls was 8.3%, rising to 17.9% amongst 16 year olds.

At 17 years of age, 29.4% of the Kisumu girls tested were HIV positive compared to only 2.2% of the boys. These patterns of HIV prevalence suggest strongly that HIV is being transmitted from older males to young females, who in turn might infect boys of their age. Behavioural surveys from Tanzania and Zambia confirm that young girls are regularly having sex with older men. We can conclude, therefore, that the HIV epidemic in the southern African region is being sustained in large part through inter-generation transmission

SOURCE: UNAIDS 2000

Results from the 1998 demographic survey give emphatic confirmation of what Batswana already know: HIV and AIDS are critical youth and development issues. According to the September 2000 Central Statistics Office demographic survey, the mortality rate for the age group 24-29 was, at 11.7% in 1998, the highest in the entire population below 65 years of age (see Fig. 2.2, next page). These figures betray the incidence of deaths from AIDS-related diseases resulting from infections that occurred when victims were either teenagers or in their very early twenties. Managing one's sex life responsibly is essential for Botswana's youth and the population at large.



Quality sex education at home, through all levels of education from primary to university, and in the workplace, is an imperative. Parental and extra parental support for boys and girls at a time when they are dealing with problems of sexuality should be strengthened. Children need to be taught that unprotected sex kills. But the lack of conclusive documentation of the dynamics of intergenerational sex suggests a need for further research.

The Low Social Status of Women

In Botswana, gender-based ascription of roles to men and women on the basis of tradition and custom is still pervasive. It has discernible effects on material outcomes and rights of citizenship for men and women. Traditionally denied equal access to formal sector employment and control over productive assets by a culture that confines them to and overburdens them with household work, women continue to suffer a disempowering sense of low esteem. Although Botswana has made tremendous progress in addressing problems of gender inequality, disparities in skills, education and experience between men and women, largely due to historically unequal access to opportunities, remain wide.

Women are on average employed in traditionally female jobs and the informal sector. In large numbers, women work as domestics, typists, secretaries, receptionists, clerks, primary school teachers and nurses. In their homes, where the husband or live-in boyfriend is an automatic choice for head of household, they carry a disproportionate burden of household work. They are generally more susceptible to job and asset deprivation than men and yet on average they have more dependants. They are relatively poorer, constituting only 37.5% of all cash earners in 1993/94. Even inheritance follows the male lineage in a family. Women's representation in decision-making structures - in politics, business and traditional leadership institutions - remains dismally out of proportion with their numbers vis-à-vis men. The Botswana house of Chiefs has only one lady Chief out of 12!

There are many reasons to suggest a link between the low status of women and their susceptibility to HIV infection. The sense of low esteem that discrimination and poverty visits upon women circumscribes their right to reproductive health choices, thus predisposing them to HIV infection. Too often, sex is had for the man's pleasure and on his terms. A participant in a peer group discussion expressed the frustration of many women who want to use condoms but are not allowed to buy by their husbands and boyfriends when she said,

"*When I showed my husband a condom and told him the doctor has said we should use them, he was very upset and accused me of having sex with the doctor. I still have itching down there but he has refused to use condoms with a woman he paid bogadi*[1] *for*"

In conditions of poverty, many women may be compelled to barter sex for material support from men and to seek casual sexual partners to help meet immediate family needs. Research has found that women are often required to extend sexual favours to supervisors as a condition for employment or promotion. When other survival strategies fail, women might enter into commercial sex work, for which there is demand in urban settings, in order to avoid poverty for themselves and their children

BOX 2.2.

GENDER INEQUALITY, INFIDELITY AND HIV AND AIDS

At the end of 1999, some 145,000 Batswana women aged 15-49 years were living with HIV and AIDS compared to 125,000 men. This finding is consistent with trends elsewhere in the sub-region. Why is this happening?

Behavioural studies in Zambia and Zimbabwe suggest a link to women's relative powerlessness in negotiating terms on which they have sex. These studies have shown repeatedly that *married* women are more at risk than single women – a trend attributed to the difficulties married women or women in steady relationships face in insisting on regular condom use.

The dynamics of marriage and steady relationships in Botswana may be different but these studies suggest that voluntary HIV-testing and consistent condom use, even within marriage and steady relationships, are essential response measures.

Commercial sex workers are a particularly vulnerable group in Botswana and yet there are only two projects on HIV and AIDS and commercial sex work, one in each of the cities of Francistown and Gaborone. Significantly, the Gaborone project is run by a women's group in Tlokweng and is supported by the Ministry of Health. Unfortunately, Botswana currently appears to lack reliable information about the size and dynamics of the commercial sex work sector, in part because commercial sex work remains illegal and substantially underground.

Addressing problems of gender inequality is an important part of the HIV and AIDS response. In 1996, the Botswana Government made the important decision of acceding to the UN Convention on the Elimination of all forms of Discrimination against Women (CEDAW). Yet both common and customary laws still have clauses that discriminate against women and limit their decision-making rights. For instance, a married woman is by law required to have the consent of her husband in order to have an application for a loan or piece of land approved. Her husband does not need her consent to enter into such contracts.

Furthermore, maintenance laws should be more sensitive to the needs of children raised by single parents of both sexes and ensure that they get adequate support from both parents. A new perspective on commercial sex work is also essential. Moralisation on commercial sex work deflects attention from the need for an effective response that acknowledges the existence of the activity and the link between commercial sex workers and the rest of society and the implications thereof.

Violence against Women

Violence against women, including murder, battering, rape and defilement, physical assault and threats to physical well being, is a crime in Botswana, albeit one of those that are not dealt with effectively by law enforcement agencies. Such acts of violence dehumanise and traumatise women, taking away from them their pride and in consequence their rights to make choices essential to their own wellbeing and that of their families. In the case of sexual violations of the rights of women, the consequences are not only physical and psychological injury but also include the risk of unwanted pregnancies and sexually transmitted infections, including infection with HIV. A particularly worrisome development is the increase in reported cases of rape.

The Ministry of Home Affairs estimates that as many as three out of five women in Botswana have been victims of assault, sexual harassment, sexual exploitation, severe beating, rape, incest, socio-economic abuse, murder, or verbal and emotional abuse. In most instances, the perpetrators of these acts of violence were husbands, boyfriends and male family members. The home environment is simply not safe enough for a lot of women.

Coercive sex, including rape, facilitates the transmission of HIV, and is especially efficient in doing so when the violations are against young women and girl children, amongst whom the risk of extensive damage to genital mucosa is high. These acts of violence against women and children persist in part because the socio-economic conditions in Botswana and the justice delivery system create conditions that are ripe for such abuse (see Box 2.3 on page 31).

There is a pressing need for more research into the sexual abuse of children and its possible correlation with HIV infection among children, and for the provision of accessible and free medical and psychological care for abused children. Above all, there is need for tougher action against sexual offenders. Amongst children aged 5-15, who best represent Botswana's hope for an AIDS-Free generation, sexual abuse by older males may well account for the majority of, if not all new infections. For the sake of Botswana, the law enforcement and justice delivery institutions should track down all sexual offenders with the intensity reserved for the most feared murderers, and impose the harshest possible sentences. (See Fig. 2.3, next page.) There is now, a very thin line between rape and murder.

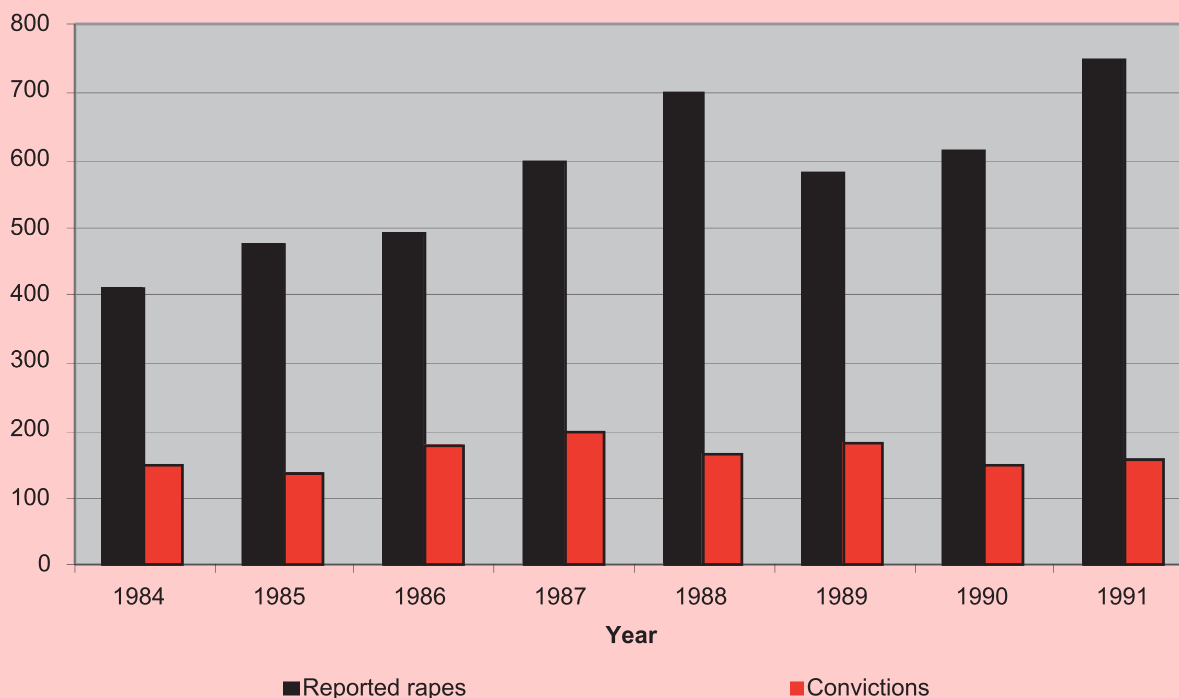
TABLE 2. 1

REPORTED CASES OF VIOLENCE AGAINST WOMEN 1997-1998

Offence	1997	1998	Increase (%)
Rape	1183	1310	11
Defilement of girls	100	137	37
Threats to kill	102	152	49
Unlawful wounding	1367	1479	8
Assault occasioning in actual bodily harm	4734	5502	16

SOURCE: LABOUR AND HOME AFFAIRS, 1999: THE SOCIO-ECONOMIC CONSEQUENCES OF VIOLENCE IN BOTSWANA

FIG 2.3



SOURCE: EMANG BASADI WOMEN'S ASSOCIATION, 1998

Inequality in Schooling

While girls outnumber boys in secondary school, it is overwhelmingly girls who prematurely leave secondary school. They account for 70% of all dropout cases. Many of these instances are related to unwanted pregnancies resulting from unprotected sex, most likely with older males. In some instances, young girls are forced to leave school to care for sick relatives.

The disparity in outcomes for boys and girls is reflected more graphically at university level, where girls account for about half the student population (48%). but are concentrated in the less competitive programmes of continuing education (mainly certificate and diploma courses), education and the humanities. The disciplines that offer the best job prospects and the best market rewards, Science and Engineering, are dominated by males.

The factors behind relatively poor educational outcomes for girls need to be isolated and addressed. This is a research challenge that should be met in the future. Existing research has however shown that besides a greater burden of household work compared to boys, girls have to cope with the pressures and distractions of relationships with older men. There is evidence, as well, of schoolgirls being pressured to provide sexual "favours" to teachers in return for decent grades (GPPC, 1996) .

Equipping early school-leavers with marketable employment skills should be a general priority. But the urgency is even greater in the context of an HIV and AIDS epidemic. A significant expansion of vocational training – especially geared at meeting the needs of young women – is an essential component of any strategy toward an AIDS-Free generation. Furthermore, tough social and legal sanctions are required to protect young women and schoolgirls from older men looking for sexual favours. Schools and indeed all institutions where positions of authority can be used to gain sexual favours should have tough and enforceable sexual harassment policies.

The sugar daddy and sugar mummy syndromes need to be tackled with commitment, particularly now that HIV and AIDS may lead unfaithful partners to seek casual relationships in groups they perceive to present a lower risk of HIV infection.

2. Attitudes towards Fertility

In Botswana, fertility and social status are intertwined and underpinned by strong gender biases. Marriage and procreation confer status. A woman's status is closely tied to her reproductive roles as mother and wife. A married woman's inability or refusal to have a child may have major social consequences. She can be ostracised and scorned by relatives or in-laws, divorced by her husband, or even forced to accept her husband's children with other women. When a union fails to produce a child, the woman is automatically blamed unless it is known that the husband cannot procreate.

BOX 2.3

THE JUSTICE DELIVERY SYSTEM MUST WIN THE CONFIDENCES OF SURVIVORS OF SEXUAL ABUSE

Most acts of violence that occur in the home go unreported. The extended family provides the first mechanism for conflict resolution in such matters and often, pressure is brought to bear upon wives and children not to shame the family by reporting cases of abuse. Thus, cases of marital rape, wife battering and incest are often mediated and 'resolved' within the extended family. Work done by the Women and Law in Southern Africa Research Trust (1999) suggests that many of the few cases of family violence that do get reported are often withdrawn before they come before the courts because of pressure from family members or the immediate family's fear of losing a breadwinner .

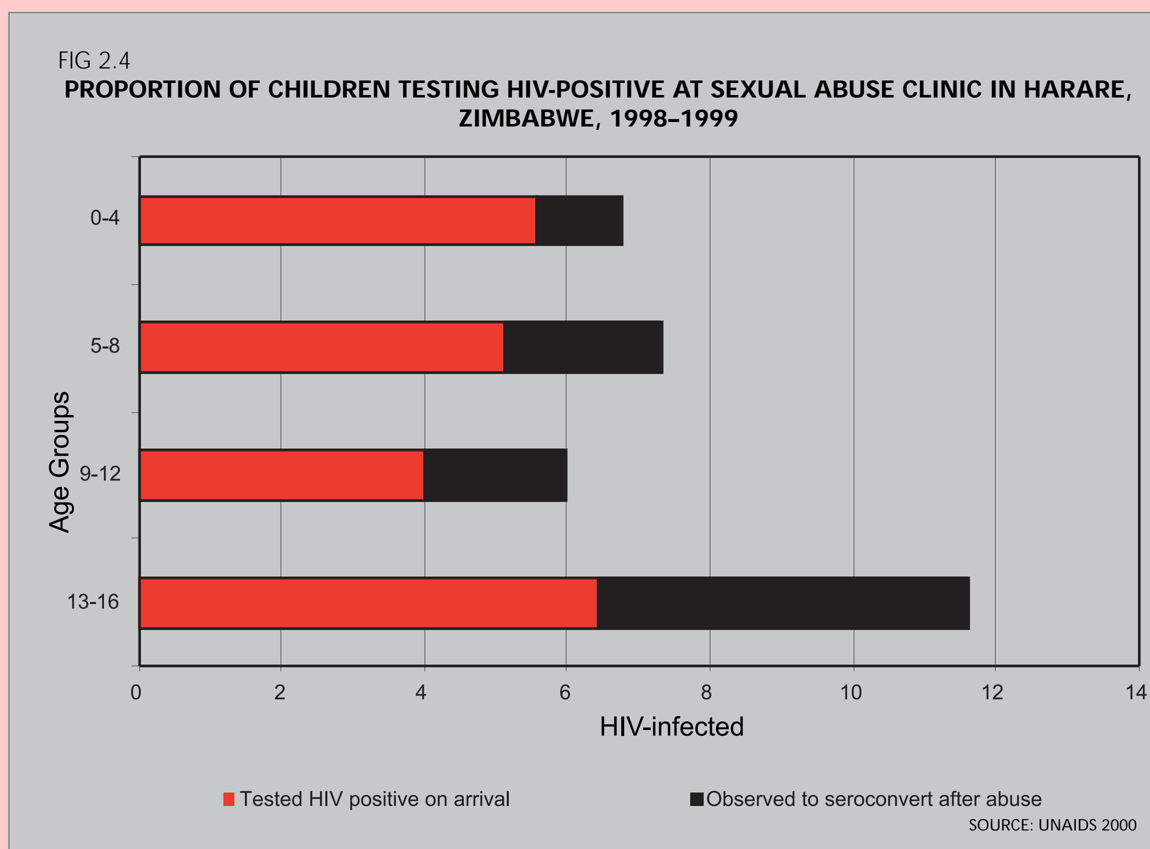
The police, to whom cases of rape and family violence are reported are often ill-equipped to handle such problems. In cases of rape, survivors have been known to suffer blame and ridicule at the hands of the police. In cases of battering, women have had to listen to police officers outlining to them the negative implications of going through with their cases. In a positive development, the Commissioner of Police instructed his officers not to mediate in any reported cases of family violence and to do their job as instructed by the complainant and required by law.

Fig. 2.3 shows that, despite a marked increase in the number of reported rapes between 1984 and 1997, conviction rates have remained distressingly low. In 1997, only a fifth of reported rape cases ended in conviction. In 1998, rape laws were changed; the minimum sentence for rape is now ten years. If sexual violence, including rape, is a factor in the spread of HIV – and all evidence indicates it is – then more effective law enforcement against sexual offences is an important factor in reducing Botswana's HIV infection rate.

Police and court records show that more than two-fifths of rape cases in Botswana involve girls younger than 16 years. In this regard, the apparent absence of information and research regarding the possible correlation between the sexual abuse of children and HIV infection rates among young Batswana is lamentable. Research in Zimbabwe has revealed high rates of sexual abuse and HIV transmission through rape among girls. A similar situation appears evident in South Africa. Fig. 2.4 below suggests that rape may account for a very high proportion of HIV infections amongst sexually abused children, particularly those between 9 and 12.

FIG 2.4

PROPORTION OF CHILDREN TESTING HIV-POSITIVE AT SEXUAL ABUSE CLINIC IN HARARE, ZIMBABWE, 1998–1999



SOURCE: UNAIDS 2000

This may partly explain the high rates of teenage pregnancy in Botswana. Whilst Tswana culture does not encourage premature sex or child bearing out of wedlock, young women may, as they get older, come under parental and peer pressure to bear children even if they are not married. Such pressure may extend to teenagers, some of whom, studies suggest, believe that having sexual intercourse during their teenage years would enhance their fertility. This is the time when they get exposed to the risk of both pregnancy and HIV-infection.

Because of the value society attaches to marriage and procreation, young men and women may feel pressured

to have children. Young women have been known to take contraceptives without the knowledge of a partner who wants a child rather than stand their ground and explain their position as an equal partner in the relationship. Others have been known to allow themselves to fall pregnant in order to pressure their partners to commit to marriage. Although the reasons are different, in both instances, condoms do not feature because the objectives do not permit their use.

At the core of these potentially fatal decisions are insecurity, often on the part of the woman, and ignorance about HIV and AIDS. Women need to be empowered, not only with information on HIV and AIDS but also on their rights within relationships with men and their families. The right to choose, including when to have a child is fundamental and no woman can afford to subordinate hers to the wishes of a partner or her family. Society's priorities on procreation and reproductive health have to be rearranged. Until parents put the HIV status of their children ahead of grandchildren, sex education would remain inadequate for contemporary development challenges. Sex education also needs a male focus so that men may acknowledge and respect the reproductive rights of their wives or girlfriends and assume greater responsibility for the prevention of HIV and AIDS.

3. *Male Attitudes*

Attempts to remedy gender inequalities often focus exclusively on empowering women. Thus, prevention programmes often overlook the fact that it is men who generally control sexual decision-making, who propagate many of the popular myths about HIV and condoms, and sanction social acceptance of multiple sexual partners for men.

In Botswana, the mean age of sexual debut is about 16 years, while the mean age at first marriage is about 26 years. That means that before individuals marry, they have had about a decade of frequent partner-change – behaviour that predisposes them to HIV infection. Disturbingly, research shows that during that interlude, knowledge of HIV, transmission and prevention, though substantial, is not translating into positive behaviour such as mutual fidelity and condom use.

Research has shown that Batswana men aged 15-19 are sexually active and that most of them have more than one sexual partner. Furthermore, most men find it acceptable to have extramarital affairs and would only use condoms when they distrust the other party. Although men generally assume the knowledgeable, aggressive and directive role in sexual encounters, they do not always have the necessary information to make healthy choices. This combination of power and ignorance can be lethal.

Combating gender discrimination requires more than empowering women. Male attitudes must change. Popular leaders and role models in all fields of society have important duties to perform in shaping gender relations. It is essential that these discriminatory attitudes, selective ignorance and repressive conduct change.

The law must also protect people living with HIV and AIDS from fraudsters who prey on the desperation of ill people and their families to defraud them off their money and assets by claiming knowledge of cures. Traditional healers

BOX 2.4

COMMON MYTHS ABOUT HIV AND AIDS

Since the anti HIV and AIDS campaign began in earnest in the late 1980s, it has come against a plethora of myths that have delayed changes in behaviour and aided the spread of the virus. These include:

* HIV and AIDS were brought to Botswana by "*Makwerekwere*" . The word *Makwerekwere* is a derogatory term used in reference to indigenous Africans other than Sotho-Tswana speakers.
* HIV infects only promiscuous people and prostitutes
* AIDS is "*Boswagadi*". In Tswana mythology anyone who has sex with a widow or widower in mourning – the mourning period may take up to a year – is afflicted by a disease called Boswagadi. In this sense Boswagadi is punishment for any person who violates the mourning ritual. Traditional Doctors have led this claim.
* Some traditional doctors can cure AIDS. Traditional Doctors have themselves made such claims. Some continue to profit from doing so.
* AIDS is the fire that is described in the Bible Chapter of Revelations – nobody can stop it.
* A mosquito can transmit HIV from one person to another in the same way it transmits malaria.
* Having sex with a virgin can cure AIDS. (*Go itlhatswa madi*). Sleeping with a virgin is likened to blood cleansing.

Many of these myths are now crumbling and the epidemic is being seen for what it is: a grossly misunderstood problem. The momentum should not be lost.

must also recognise that it is in their collective interest to ensure ethical conduct by their own. The full potential of traditional medicine may be yet to be realised but quacks who make unfounded claims do not advance its cause.

4. Association between STD and HIV Infection

Men and women with sexually transmitted diseases (STDs) face a high risk of HIV infection during sex. Effective treatment and prevention of sexually transmitted disease is thus an important aspect of the anti-HIV and AIDS effort. In Tanzania, better treatment of STDs was shown to reduce the risk of HIV infection by around 40% . The link between STDs and HIV and AIDS is obvious. Anyone who contracts a sexually transmitted disease must have been engaged, wilfully or through coercion, in unprotected sex. Furthermore, STDs break genital mucosa, making it easier for the virus to penetrate the skin.

The HIV prevalence rate among men with STDs is about 50% and 60% in Gaborone and Francistown, respectively (see Annex 1). Yet, research indicates that a significant number of Botswana men are not aware that STDs aid HIV transmission. Tragically, and as Fig. 2.5 shows, the number of outpatients attending clinics for STD treatment has stayed relatively stable over the period 1994 to 1997

The overall number of persons with STDs could be higher though, since some shun clinics and prefer to seek alternative treatment; from traditional healers, for example.

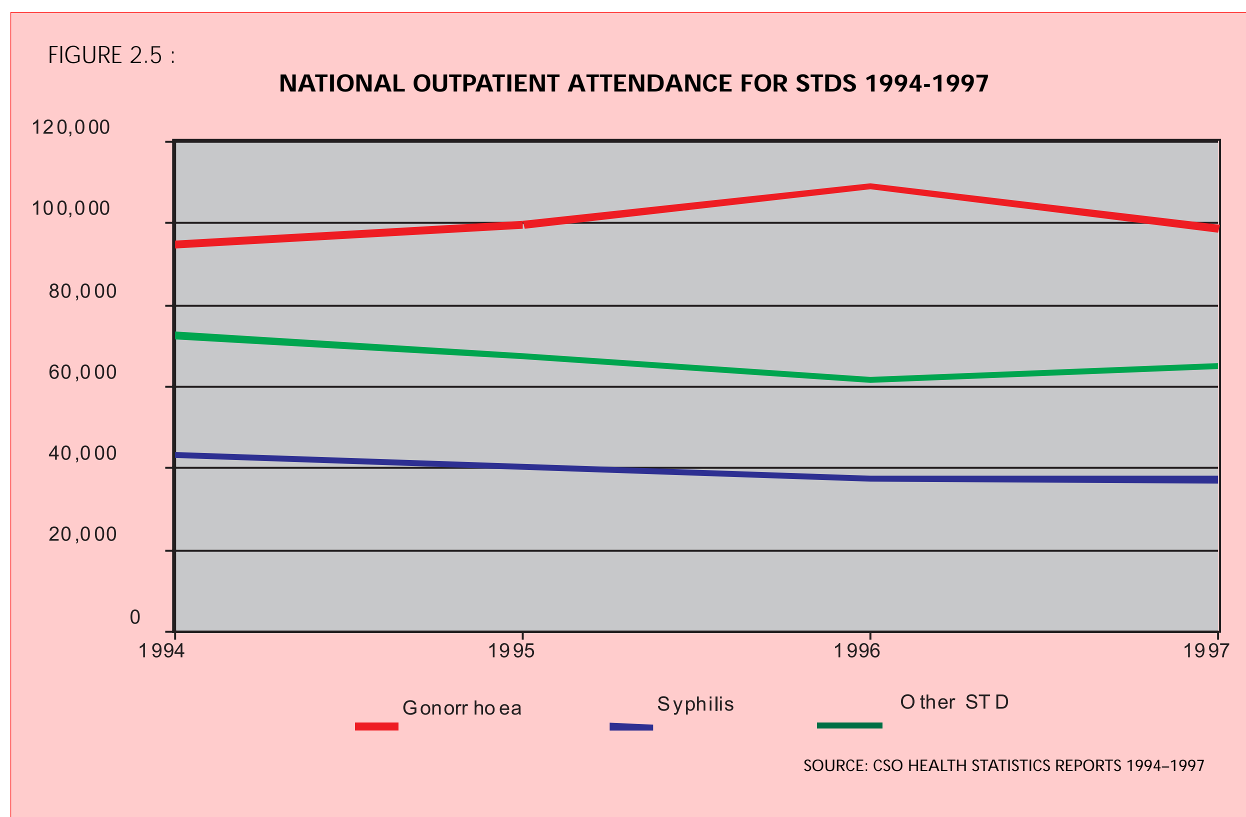
More effective treatment of STDs can be an effective measure to slow the spread of HIV. But prevention through consistent and correct condom use is even more effective. Indeed, Botswana has gone to some lengths to distribute condoms throughout the country. Fig. 2.6(next page) shows the trend in condom distribution from Government public health facilities between 1991 and 1997.

Two points require emphasis. Condom distribution has increased, but coverage is still low – less than six out of ten sexually active Batswana are reported to have collected condoms from public health institutions in 1997. This is of course an understatement since some were distributed through Population Services International and independent retailers but the government provides the most comprehensive coverage. More importantly, condom distribution does not equal condom use, let alone consistent and correct use. Hence, the discrepancy between Figs 2.5 and 2.6: increasing condom distribution coinciding with high rates of STD infection.

There is a pressing need for determined public awareness campaigns that counter common myths about condoms and that effectively drive home the need for regular condom use. Whilst clinics and public offices are good condom distribution centres, the distribution system at clinics has to become more user friendly. Consideration should be given to making free condoms available in bars and entertainment centres. Presently, almost every hotel room in Botswana has a Bible but few offer condoms! Condoms should become a standard feature of hotel room complimentary products.

FIGURE 2.5 :

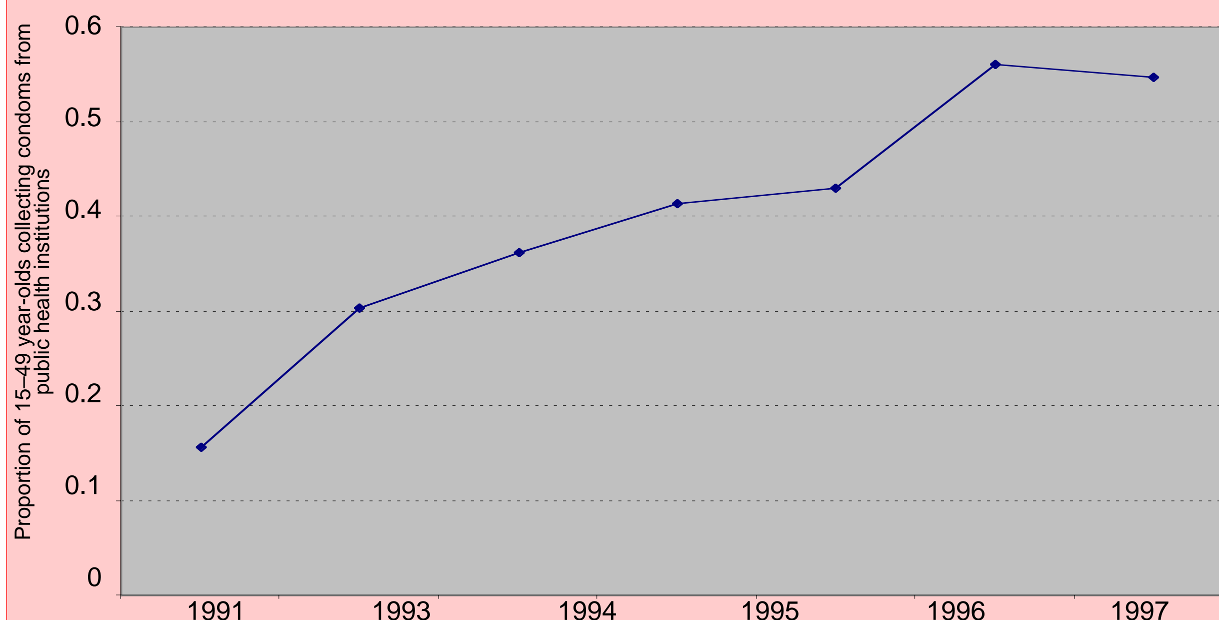
NATIONAL OUTPATIENT ATTENDANCE FOR STDS 1994-1997



SOURCE: CSO HEALTH STATISTICS REPORTS 1994–1997

FIGURE 2.6

CONDOM DISTRIBUTION FROM GOVERNMENT AND PUBLIC HEALTH FACILITIES



SOURCE: HEALTH STATISTICS, VARIOUS YEARS' AND CSO POPULATION PROJECTIONS 1991–1997

5. *Mother to Child Transmission (MTCT)*

In the age group 0-4, the ratio of male to female AIDS cases is nearly 1:1. These cases are overwhelmingly the result of mothers transmitting the virus to their children during pregnancy, birth or breastfeeding and are a function of increased HIV prevalence among women of childbearing age. MTCT programmes are being introduced in Gaborone, Francistown, Tutume and Kweneng districts. The Government is considering rolling the programme out further. It is estimated that 7,000-9,000 babies are being infected annually through MTCT in Botswana.

Reducing MTCT requires two key but closely linked interventions. The first entails fostering a culture of voluntary counselling and testing (VCT). New research in Gaborone has found that the fear of being rejected by partners and/or being stigmatised in their community is a major disincentive for voluntary testing among women. There is also scepticism about health workers' respect for confidentiality.

The second intervention relates to short course preventive therapy for MTCT. Numerous studies in Africa and elsewhere have confirmed that the availability of preventive therapy for MTCT boosts participation in VCT programmes. This can double the advantage: drug treatment can prevent the virus from being transmitted to children and infants whilst knowledge of one status provides an incentive for positive and responsible behaviour.

6. *Men Having Sex with Men*

Although HIV is transmitted mainly through heterosexual intercourse in Botswana, men having sex with men is a reality and a factor, albeit an apparently minor one, in the spread of the virus. How minor a factor it is remains unknown, thanks to homophobic laws and sentiments, as well as a shortage of reliable research. A 1998 study elicited mixed responses from young men on the topic of male homosexuality. Some were appalled at the idea of a man having sex with another man, but others admitted that it does happen in Botswana society, hence the noun *'matanyola'*. Tswana culture abhors *matanyola* as an act of sexual perversion.

BOX 2.5

MATANYOLA – A CASE OF SOCIETY IN DENIAL

Sex between men is not a new phenomenon in Botswana. Batswana do not condone it and have kept it as an illegal act. The word *matanyola* refers to penetrative anal sex, particularly between men.

In places such as Gaborone, there are known homosexuals, some of whom are active campaigners of homosexual rights. Indeed in 1999, the rights of homosexuals were discussed at a conference that attracted Justice Edwin Cameroon of South Africa. In prisons, allegations of sex between men and rape abound.

Homosexuals in Botswana are denied their rights by both state-sanctioned (legal) and social discrimination. Many of the men who engage in homosexual sex lead a double life in which they date girls and even marry. Studies elsewhere in the world, Brazil, USA and Thailand for instance, show that homosexuals are a high-risk group and yet an overwhelming majority of them also engage in heterosexual sex. The pertinence of this state of affairs to HIV transmission is obvious.

Sex between men is a common reality in Botswana's prisons. As far back as 1996, a study on behaviour and practices among male prison inmates reported that most inmates admitted homosexuality was practised in prisons although, not surprisingly, only a small percentage would admit they personally engaged in such liaisons. Yet, condoms are not, as a rule distributed to prison inmates, nor is rape in prisons regarded as a serious matter by the authorities.

Legal and social discrimination against homosexuals and the denial that men have sex with men in Botswana stand in the way of achieving an AIDS-Free generation. Homosexual rape in prisons and the refusal of the Government to distribute condoms to prisoners does not help halt the spread of HIV and AIDS. Men who have sex with men have the same rights to education, counselling, treatment and care in relation to HIV and AIDS as heterosexual men. Neglecting their need for help will put many others with whom they have sexual interaction at risk of HIV infection and loss of livelihood. They have girl friends, wives and children whom the state and society also fail by not addressing homosexuality and HIV and AIDS.

Botswana could start by decriminalising homosexuality and distributing condoms in prisons. Only then can discrimination against homosexuals be addressed with effect. Homophobia against homosexuality should be treated with the same disdain that other forms of discrimination are treated with.

7. *Traditional Practices*

There is very little research in Botswana to evaluate the quantitative risks associated with traditional sexual practices, but they seem to be few, compared to many other African countries. The most worrying is the so-called dry sex, based on belief that it enhances male pleasure and strengthens bonds. The prevalence of vaginal drying practices in which herbs, aluminium hydroxide powder, stones and other agents are inserted into the vagina is widely reported in Zimbabwe. It appears not to be a traditional practice in Botswana, but these products are bought from Zimbabwean hawkers and used by some Batswana.

Not only does the practice reflect the subordination of women to male sexual pleasure but it also imperils the health of both men and women. Traditional or not, it increases the risk of HIV infection since the dessicating agents inserted into the vagina cause inflammation and lesions that make transmission of the virus more likely during unprotected sex. The preference for tightness and friction during sex may in part explain the prevalence of sex between older men and teenagers. The solution to this problem lies in comprehensive sex education for both adults and children.

8. *Sex (mis)Education*

Historically in Botswana, designated relatives provided adolescents with basic sex education. However, urban migration and changing family relationships have contributed to the demise of traditional instruction, while sex education in the schools has for a long time been limited to the stolid biological facts about reproduction. Parents are conspicuously absent in the sexual education of their children. Interviews with mothers indicate that mothers feel that their culture forbids them to discuss sex with their daughters. While some mothers do give their daughters instructions on menstruation and personal hygiene, most feel unable to broach any topic related to sex, other than the admonition to 'stay away from boys'.

Girls, in turn, feel 'embarrassed' to discuss these matters with their mothers and rely on friends or older sisters. Boys receive even less instruction on how to make responsible sexual decisions. In fact, they reported being pressured by peers and older brothers and cousins to become sexually active, since having sex is an 'achievement'. As a result, Batswana boys and girls get most of their information about sex from friends, romance novels, movies and magazines.

There is an urgent need for quality sex education in Botswana's schools. But changing sexual attitudes requires more than quality sex education. Sex plays different social roles among male and female youth, and these need to be examined thoroughly through more research. For example, an ongoing study in Umtata, South Africa, has suggestively reported that among young men, sexual conquest is an important source of self-esteem, social status and life-meaning in economically depressed communities. Among women, a complex mix of factors (generally centred on male power and dominance) ensure their submission and,

occasionally, collusion in what is essentially a form of male self-validation but which is not always entirely bereft of social currency for the female.

The lesson is that these behaviours are not merely lodged in individuals but are socially constructed. Change in sexual behaviour therefore is fundamentally determined by groups beliefs and behaviours. This is particularly so for the youth, amongst whom peer pressure and its effects are pervasive. But it is also true for adults. In consequence thereof, for any effort at changing sexual behaviour on a large scale to be successful, it must respond effectively to this interplay between the individual and the social. Such efforts require shifts in hetherto acceptable social norms and hence the need to construct supportive laws and promote social values, beliefs and attitudes that constrain behaviour that aids the spread of HIV.

9. Migration, Poverty and Inequality

About 45% of the 1.6 million people living in Botswana are in the sexually active bracket of 15-49 years. Almost an equal number of Batswana live in rural and in urban settings (51% and 49%). However the traditional shuttling between village homesteads, lands area and cattle posts, and more recently urban areas, renders the urban/rural distinction largely insignificant when probing the dynamics of HIV and AIDS in the country. Botswana has developed a strong transport network that links most of the populated centres of the country. These factors partly explain why there is little difference between urban and rural HIV prevalence rates – and why HIV has been transmitted so widely, so quickly.

Other factors, though, should not be overlooked. Like workers in other neighbouring countries, Batswana men have for decades travelled to South Africa in search of work. This work-related migration has disrupted family life and led to wider transmission of STDs. Inter-regional trade and investment have grown impressively since South Africa's democratic victory. Increasingly, countries to the north of South Africa are using its harbours for imports and exports. The completion of the Kalahari Highway (linking Botswana, Namibia and South Africa) has further increased the extent and frequency with which people travel between the countries.

Within Botswana, large public infrastructure projects and expanded private sector activities have seen workers seek livelihoods at one construction site after another. Multiple formal and informal sexual liaisons are common features of this labour migration.

A 1999 study on "HIV and AIDS and the Mobile population Groups in Botswana" tracked the impact of migration on the spread of HIV and AIDS. It concluded that high mobility was an important contributing factor in the spread of HIV and AIDS. Moreover, the age distribution of mobile workers matched that of HIV and AIDS cases. Close to 40% of mobile workers were aged 22-29 years and over 30% were 30-39 years old. Most mobile workers were found to be single (with live-in partners where they worked), while some of the married workers had parallel families where they worked. Many(37%) went home at least once a month. More than half had sexual intercourse at least twice a week. Rendered clear in such data was the potential for the spread of HIV and AIDS across vast distances. Interestingly, this co-factor appears to be a function of developmental progress. Areas that had hosted development projects were found to have especially high rates of HIV infection.

There is clear room for intervention. About 97% of mobile workers interviewed in the study cited above were aware of HIV and AIDS and the modes of HIV transmission. Yet, only one in two mobile workers interviewed said they always used a condom.

Safe sex campaigns alone, though, are an inadequate response to this factor in HIV transmission, because migration is also one of many survival strategies of the poor. Despite its impressive human development gains, Botswana remains a country in which almost one in two people live in poverty.

Poverty acts in several ways as an important co-factor in the transmission of HIV. It forces the poor, especially women, to engage in behaviour that exposes them to higher risk of HIV infection. Especially in rural areas, poverty compels people to migrate in search of work or some form of sustainable livelihood. As a recent UNDP study on poverty and HIV and AIDS noted: "Mobile populations, which often consist of large numbers of men and women, are isolated from traditional cultural and social networks and in the new conditions they will often engage in risky behaviours". Too frequently overlooked is the fact that, education and information campaigns aimed at altering behaviour "are often irrelevant and inoperable given the reality" of the lives of the poor. Faced with a limited range of options, their survival often depends on choices that involve great risks.

Yet, it would be inaccurate to regard poverty as the ubiquitous, indeed necessary, co-factor in the spread of HIV. In urban Botswana (as in neighbouring Zambia and elsewhere in the region), inequality appears to be a more decisive co-factor – especially where material and gender inequalities overlap. As the UNDP report cited earlier concludes, "sustained human development is essential for any effective response to the epidemic in Africa".

Measures to eradicate poverty and reduce inequalities are essential for overcoming the HIV and AIDS epidemic. Such efforts would include support for greater social mobilisation among the poor, as well as programmes in micro-finance, small-scale urban agriculture, improved food security, and other self-employment and job creation activities. Overall, Botswana's HIV and AIDS strategy will succeed only if its strategy for development is characterised by speedier and greater redistribution of assets, income and resources.

10. Silence and Denial

Reviews of why Uganda, Senegal and Thailand achieved success in stemming the epidemic have consistently highlighted the importance of candour about HIV and AIDS and sexuality – not simply among ordinary people, but especially among leaders in all sectors and at all levels of society.

Silence about sexuality and HIV and AIDS breeds stigma and discrimination. People living with AIDS are deprived of social support. Even more fundamental, silence undermines prevention campaigns. Latest estimates show that 33-36% of adults in Botswana are HIV-positive. But most of them do not know their status. Sadly, at the individual and household level, silence and denial – *two of the preconditions for a rampant AIDS epidemic* – remain pervasive in Botswana.

HOPE FOR AN AIDS-FREE GENERATION

The Vision 2016 HIV and AIDS target is within Botswana's reach. According to 1999 UNAIDS estimates, approximately 98 % of children below 15 years were HIV negative in Botswana. This represents an estimated 658,610 young Batswana who are not infected. This cohort represents Botswana's hope for an AIDS-Free generation. HIV infections enter the cohort through intergenerational sex. In this way, the epidemic sustains itself from one generation to another. In both Lusaka and Kampala, early signs of lower HIV prevalence have been associated with changes in sexual behaviour in those aged 15 and below.

But even more encouraging is the commitment of the leadership in Botswana to containing and reversing trends in HIV infection. In year 2001, every Government department will have a budget allocation for mainstreaming HIV and AIDS into its activities. The President and the Minister of Health are very visible anti-HIV and AIDS campaigners. The private sector has come on board with additional resources and innovative responses. There is no lack of will to mobilise every Botswana citizen, corporate or human, to become an active campaigner against HIV and AIDS.

This collective effort, outlined in detail in Chapter 3, will bear fruit. Already, anecdotal evidence suggests discernible change in sexual behaviour amongst teenagers. Response measures will be even more productive when more decisive action is taken against some of the structural determinants of the epidemic. Campaigns against poverty and inequality, intergenerational sex, discrimination against women and homosexuals are tough but winnable. There is sufficient goodwill to build on. Efforts to generate more accurate data on the epidemic should be intensified to generate more knowledge about the epidemic and inform the fine-tuning of ongoing efforts.

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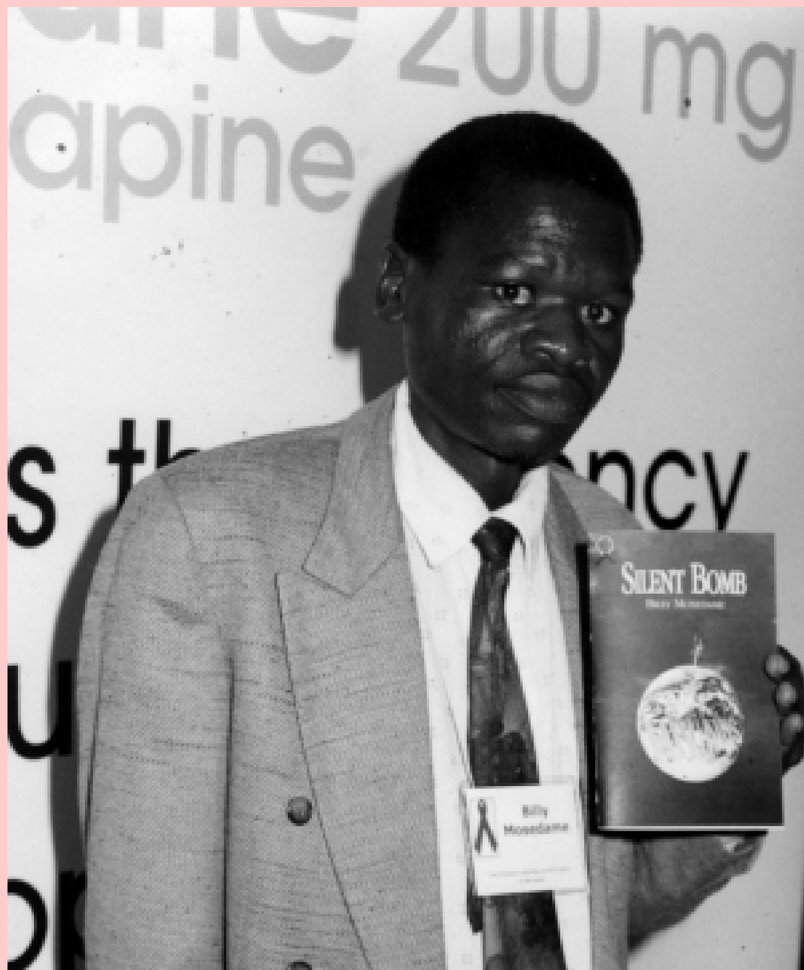
1. Bogadi means bride price. In Tswana culture, the groom's family pays bogadi, to the bride's family traditionally in cattle, to show its appreciation of their daughter-in-law.

SPECIAL CONTRIBUTION

BY BILLY MOSEDAME

BREAKING THE SILENCE



"You crept into our midst
Like a sudden burst of light
Unexpected and caught us
In our sleep.
When we woke up
You had already settled
Amongst us.

...

You are a continental
heterosexual
Killer disease.
You respect no boundaries or
colour
You affect each and every nation
In the world.

...

Deny them not their rights
Their right to work,
Their right to bank loans,
Their right to insurance,
Their right to a family,
Their right to a safe passage and
travel
Their right to love and be loved
..."

The Silent Bomb

I am a young Motswana man aged 32 and I am living positively with HIV and AIDS. I came to know about my HIV and AIDS status in 1993 after the death of my lover from an AIDS-related disease.

I know that I got HIV from a woman, who got it from a man, who got it from a woman who got it from a man. This is a long and endless story and I have learnt to do away with blame as it is unproductive. What is important is that HIV and AIDS is here with us and the question is what are we doing about it?

I went public on my HIV status because I wanted to break the shroud of secrecy and silence surrounding HIV and AIDS. I believe silence is death, information is hope and that the only HIV and AIDS vaccine that we have is education. I also went public to give HIV and AIDS the human face it deserves and to advocate for the rights of all people living with HIV and AIDS.

I have so far written a poetry book on HIV and AIDS entitled "The Silent Bomb" in which I share my fears and feelings as a person living with HIV and AIDS as well as call for care and support for people with HIV and AIDS.

My plea of genuine concern to my countrymen and the world is that we are at war, we are fighting "the Silent Bomb" HIV and AIDS. The good thing is that we have weapons with which to fight it. The weapons we have at our disposal are education, information, compassion, care, abstinence, and consistent condom use.

Stigmatisation, denial and discrimination are enemies, which must be kicked out of every home, workplace and the entire world if we are to realistically deal with HIV and AIDS. To those living with HIV and AIDS keep the virus to yourselves, and be selfish with it. Remember that if you are HIV-positive and you keep the virus to yourself then it will die with you, but if you give it to someone else it will live after your death.

It is everyone's responsibility to help create an HIV and AIDS-free world. I have no doubt that together, as equal partners against HIV and AIDS, we can and shall win the battle against HIV and AIDS.

Chapter 3

THE RESPONSE SO FAR

"I want to see the parliamentary select HIV and AIDS Committee and Members of Parliament facilitating and supporting the establishment and operation of HIV and AIDS District Multi-Sectoral Committees, and ensuring that related community based organisations exist in your communities".

- Festus Mogae -
(President of the Repulblic of Botswana addressing Members of Parliament and the National AIDS Council)

The initial response to the AIDS crisis in Botswana was no different from that in most other countries hit by the epidemic. It was too late, too narrowly health-focused, and lagged several steps behind the unfolding disaster. Predictably, it was all left to the Government and in particular to the Ministry of Health.

Like the global response, Botswana's was fraught with denial and ignorance; hobbled by the belief that HIV and AIDS could be tackled like any other infectious disease and hampered by inability to recognise and confront the structural determinants of the epidemic. Policy makers and public health officials tended to concentrate on the tip of the iceberg. The epidemic could be halted, they assumed, by informing people about HIV and AIDS, and by persuading them not to engage in unsafe sex. In the event, the social and economic factors that aid the spread of HIV were neglected.

Thirteen years after the first case of HIV and AIDS in Botswana was diagnosed, the Revised Botswana National Policy on HIV and AIDS still put emphasis on education and information campaigns and other measures that address the immediate determinants of the epidemic. The policy does not adequately address the structural determinants of the epidemic, especially poverty. This is despite evidence from surveys as far back as 1993 indicating poverty as a factor in the spread of HIV. The policy envisages the contribution of the Ministry of Finance and Development Planning (MFDP) to the national AIDS response as follows:

* To ensure that adequate resources are made available to the various ministries for HIV and AIDS and STD prevention and care. Co-ordination of external support agencies' financial contributions for HIV and AIDS prevention and care is also carried out by this Ministry in collaboration with recipient line ministries
* Use epidemiological data provided by the Ministry of Health, and commission appropriate research to generate data with which to make projections of the economic and human resource development impact of the epidemic, and incorporate them into adjustments in manpower and economic planning.

The policy fell short of appreciating the link between poverty and health and consequently failed to emphasise poverty reduction as an important contribution by MFDP to the anti-HIV and AIDS initiative. But, as the UNDP asserts in Poverty and HIV and AIDS in sub-Saharan Africa; "unless the realities of the lives of the poor are changed, they will persist with behaviours which expose them to HIV infection". An epidemiological approach to health and HIV and AIDS, which is the view now being recommended by the World Health Organisation, would emphasise poverty reduction as part of the long-term

response. The long-term response is in essence the road to the Vision 2016 HIV and AIDS targets and the AIDS-Free generation.

The defects in the early response reflected more the state of knowledge about HIV and AIDS at the time than lack of will to respond effectively. Confronted with an epidemic about which little was known, the Government was bound to rely on its development partners to provide policy advice. Indeed it invited the World Health Organisation (WHO) to provide technical support for its early efforts. In the event, the resultant public response has since the late 1980s and early 1990s focused on aggressive information and education campaigns geared towards promoting safe sex. It did not halt, let alone reverse, the epidemic for a variety of reasons and the work ahead is clearly cut out. Behaviour must change and the structural determinants of the spread of the HIV should be addressed decisively.

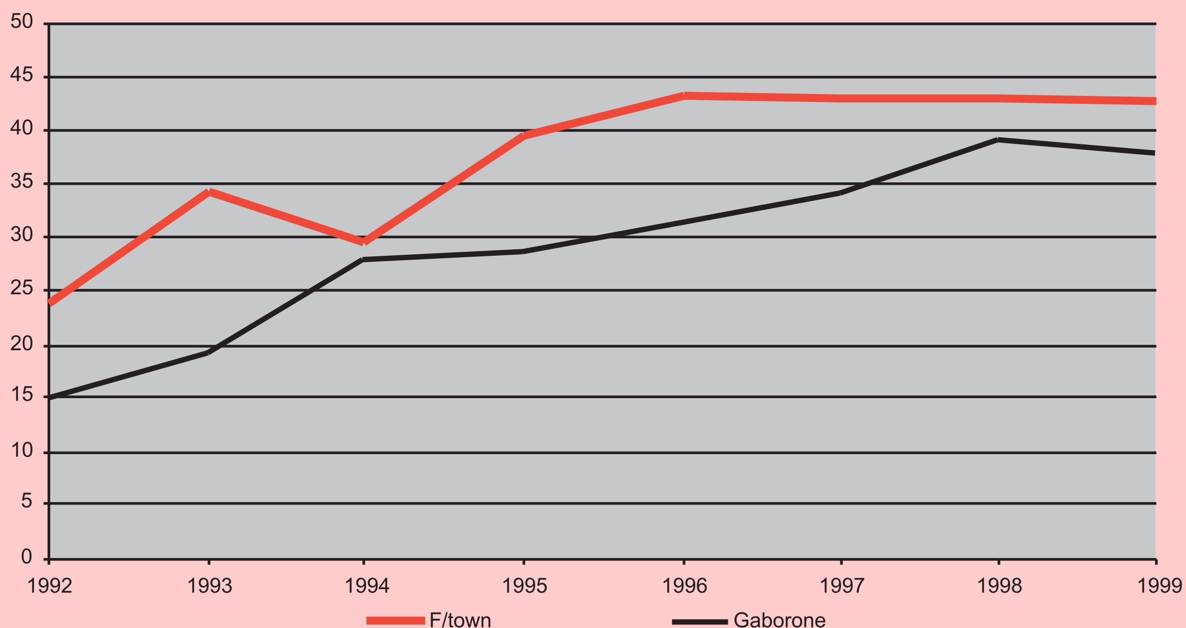
In recognising the formidable task at hand, the painful reality that the valiant response by the Government of Botswana and its partners has not prevented the epidemic from spinning almost out of control has to be confronted. The ultimate indicator of success of any AIDS prevention programme is the extent to which infection rates have been reduced. About one-third of the adult population in Botswana is now estimated to be infected with HIV. The impact on human development is already distressing. In the next few years, as the HIV epidemic is overtaken by an AIDS epidemic, that impact will become devastating.

But it is not all gloom and doom. The Government should be praised for putting HIV and AIDS firmly on the agenda, and for launching programmes to reduce the spread of HIV and mitigate the socio-economic effects of the epidemic. It has launched a comprehensive multi-sectoral response, nationally and at the district level; introduced home-based care; prevention of mother to child transmission projects; orphan care programmes; and included HIV and AIDS in primary and secondary school curricula. Botswana is now involved in a comprehensive social mobilisation phase aimed at breaking the silence on HIV and AIDS and turning every resident of Botswana into an active anti-HIV and AIDS campaigner.

As this phase takes off, there are at least three solid foundations that Botswana can build on. First, knowledge about HIV and AIDS, its transmission modes and effects, is widespread throughout society and the Government has clearly aligned itself with a multi-sectoral response. Second, of the almost 700,000 Batswana under the age of 15, only about 10,000 are estimated to be infected with HIV. The National HIV and AIDS Policy is therefore right in taking education on sexually transmitted diseases, including HIV and AIDS, to schools. Third, trends in HIV seroprevalence rates amongst pregnant women suggest that in the adult population, the early response may now be producing positive results. Recent antenatal clinic data for Gaborone and Francistown suggest that the HIV seroprevalence rate among pregnant women might be levelling off or even declining slightly.

In Francistown, however, HIV prevalence appears to be approaching a “natural” threshold where it slows down

FIGURE 3.1:
TRENDS IN HIV SEROPREVALENCE RATE (%) AMONG PREGNANT WOMEN - GABORONE AND FRANCISTOWN, 1992-1999.



SOURCE: SENTINEL SURVEILLANCE REPORT, 1999

or levels out. The prevalence rate is still exceptionally high, and it cannot be ascertained whether the apparent levelling off reflects the success of HIV and AIDS programmes in the area or the epidemic's natural cycle.

THE HIV AND AIDS RESPONSE - A HISTORICAL PERSPECTIVE

Botswana's response to the HIV and AIDS epidemic can be divided into three distinct phases. The early phase (1987–1989) focused mainly on screening of blood to eliminate the risk of HIV transmission to blood patients through blood transfusion. The second phase (1989–1997) saw the introduction of the information, education and communication (IEC) programmes. During the third phase (1997–2002), the response gradually expanded. The third phase, which has just begun, is distinguishable from the others by its comprehensiveness and the demonstrable emergence of concern and action on the part of the political leadership on a wide scale.

As in so many other countries, the turn of the century also marked a crossroad in the national response to HIV and AIDS. The choice was between a business as usual approach and national mobilisation on a scale commensurate with the size of the challenge. Botswana seems to have chosen the latter option.

Phase 1 (1987-1989) – Securing the blood supply

Botswana's first AIDS case was reported in 1985. Then, AIDS was seen as a disease that targeted male homosexuals in the West and people from other African countries. In 1986, however, the Government responded by setting up a programme under the Epidemiology Unit of the Ministry of Health. Its focus was narrow: screening blood products and ensuring that disposable needles were available and used throughout the National Health Service. Multilateral agencies, led by the WHO, made substantial input towards the development of the early responses.

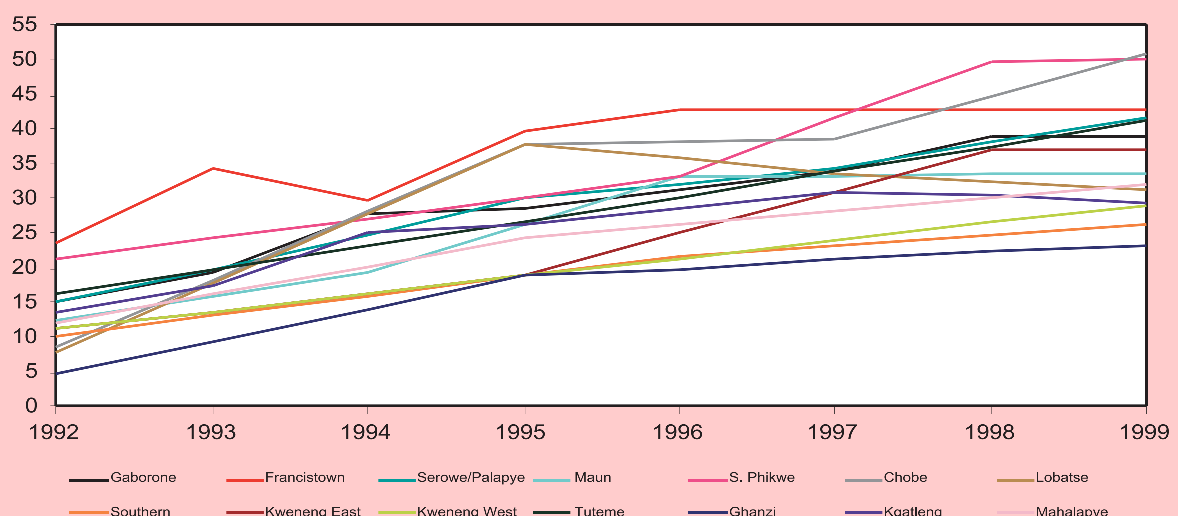
In line with WHO procedures, an interim Short-Term Plan (STP) was developed for 1987–1989. The plan focused on boosting public awareness about HIV and AIDS and training health workers in the clinical management of the disease. It emphasised securing a safe blood supply, clinical interventions, sero-surveillance and other health sector related concerns. Unfortunately, during that period the public awareness and information campaigns lacked sufficient quality and coverage.

Phase II (1989-1997) – A bio-medical approach to a development challenge

Next followed the first five-year Medium Term Plan (MTP I), which spanned the period 1989-1997. The plan was meant to amplify efforts to contain the rapidly emerging epidemic and in line with the dominant practices of the time lodged most of the responsibility with the Ministry of Health . The main objectives of the MTP I were to:

* strengthen epidemiological surveillance activities;
* prevent sexual transmission of HIV;
* prevent HIV transmission through blood and blood products;

FIGURE 3.2



SOURCE: SENTINEL SURVEILLANCE REPORT 1999

* prevent peri-natal transmission;

* strengthen diagnostic management and infection control; and

* set up systems for monitoring and evaluation.

Unfortunately, other partners (ministries, donors other than WHO, and civil society organisations) were not adequately drawn into a co-ordinated and strategic response. Yet, there was also a growing appreciation world-wide for the need to muster a multisectoral approach that responded to the complex character of the epidemic and the manifold factors that aid its spread. Alone, the Ministry of Health could not prevent the impending epidemic. By 1992, the HIV prevalence rate in antenatal clinics was already surpassing the 15% mark (the rate in Mozambique and Malawi today). It became clear the response would fail unless all sectors – public and private – were mobilised.

In 1992, the AIDS/Sexually Transmitted Disease Unit was set up to co-ordinate the National AIDS Control Programme (NACP). Significantly, the unit was separate from the epidemiology unit where the NACP was initially located. The new unit therefore represented a merger between two formerly independent programmes. The ASU now operates through seven sub-units that focus – as their names indicate – on Counselling and Home Based Care, Information, Education and Communication, Surveillance and Research, STDs, NGOs, Clinical Management, and Sector Support.

By 1993, these and other efforts seemed to be paying off. Research suggested that knowledge about HIV and AIDS was increasing, along with condom use. In a 1993 survey, more than 90% of interviewed youths displayed substantially correct knowledge about HIV transmission. Between 80% and 90% correctly stated two methods of prevention, and 50-60% said they used condoms consistently with nine out of ten casual sex partners. The distribution of condoms through Government outlets rose significantly since 1991. Yet, as shown in Chapter 2, the phenomenal rise in condom use has not been reflected in a corresponding drop in STD cases other than HIV.

The achievements were neither halting nor, it seemed, even slowing the advance of the epidemic. By the early 1990s, as Fig 3.2 shows, HIV seroprevalence among pregnant women in Botswana's largest urban areas was rising rapidly. In Lobatse and Serowe/Palapye, HIV prevalence rates rose from 17.8% and 19.9% respectively in 1993 to over 30% in each by 1997.

The trend was both disturbing and puzzling. How could the epidemic be spreading so rapidly if people were well informed about the risks? The reason was that people were not translating knowledge and awareness about HIV and AIDS into behaviour that would eliminate the risk of HIV infection. Neither was it a simple outcome of some collective obstinacy. People's choices are shaped by a multiplicity of factors, many of which operate beyond their immediate and direct influence. The HIV and AIDS response was not addressing these underlying structural realities that enable the epidemic to spread. Botswana's response had run into perhaps the biggest blind spot of world-wide efforts to contain and eliminate epidemics; failure to address the basic courses.

It does not matter how much information on HIV and AIDS is disseminated; how attentively it is absorbed; or how many condoms are supplied; poverty, financial dependence, inequality, gender discrimination and formidably defended social and cultural norms still make it difficult for a woman to refuse sex without a condom when her unfaithful husband or lover returns home. As long as these underlying factors continue to exist at current levels, the epidemic will rage on.

Phase III (1997–2002) — The response broadens

Building on the narrowly focused MTP I, preparations for a more expansive MTP II process began in 1994. It was much more thorough and participatory, and drew in some hitherto largely excluded stakeholders, amongst them NGOs and private firms. Covering the 1997-2002 period, the MTP II has two overriding goals:

* To reduce HIV infection and transmission, and

* To reduce the impact of HIV and AIDS at all levels of society.

HOLDING IT TOGETHER – THE NATIONAL-LEVEL RESPONSE

The new MTP II is distinguished by its multisectoral approach and an evident commitment to redress many of the shortcomings that plagued the earlier response phases. Importantly, the plan recognises gender inequality as a prime determinant of HIV transmission, although, as with other HIV and AIDS responses in the Southern African region, men's roles and duties in achieving gender equality seem overlooked.

Defining the MPT II is a pronounced shift away from seeing HIV and AIDS as primarily a medical and health

BOX 3.1

KEY FEATURES OF THE NATIONAL POLICY ON HIV AND AIDS

The HIV and AIDS epidemic is rightly treated as a national crisis in Botswana. The National Policy on HIV and AIDS provides for a multisectoral response under which individual agencies, private and public, are expected to make their contribution to the collective effort. In summary form, key agencies are assigned responsibilities as follows;

- The Office of the President will provide political leadership for the national response and ensure that all sectors are mobilised. In particular, it will focus on mobilising policymakers in the different ministries and mobilising public and private resources to finance prevention and care.
- The Department of Information and Broadcasting will, in collaboration with the Ministry of Health, NGOs and CBOs, play an active role in disseminating information on HIV and AIDS.
- The Directorate of Public Service Management will develop a policy for the management of HIV and AIDS in the public service service and ensure that workplace HIV and AIDS programmes are implemented throughout the public sector.
- The Ministry of Health is required to 'lead the development and refinement of strategies for prevention and care, involving other Government agencies, NGOs and the private sector' and 'provide technical support to other ministries and sectors as they develop and implement their own HIV and AIDS prevention and care activities'.
- The Ministry of Education has to incorporate AIDS and STD education into all levels and institutions of education and involve parents more actively in those activities.
- The Ministry of Labour, Home Affairs and Social Welfare is tasked with ensuring that the rights of HIV-infected individuals, including workers, are protected and developing and implementing HIV and AIDS prevention programmes for relevant groups within its purview. These include prisoners, women, and the youth.
- The Ministry of Finance and Developing Planning will mobilise resources to finance the HIV and AIDS related activities of line ministries and commission research on specific aspects of HIV and AIDS.
- The Ministry of Local Government will assume primary responsibility for carrying out eligibility assessment for destitution support for people living with HIV and AIDS and orphans.
- Other ministries will develop their own policies in line with the National Policy on HIV and AIDS/
- Private firms are expected to develop HIV and AIDS programmes for their staff, in line with the National Policy; to mobilise private sector resources for HIV and AIDS and integrate HIV and AIDS into their training programmes
- NGOs and CBOs will take responsibility for advocacy and social mobilisation, the design and implementation of innovative prevention and care programmes as well as mobilising resources for community home based care.

I*t is essential that these processes are rigorously monitored and evaluated against targets*. The new, multi-sectoral approach is co-ordinated by the National AIDS Council, which is chaired by the President.

SOURCE: REVISED BOTSWANA NATIONAL POLICY ON AIDS; AIDS/STD UNIT 1998, MINISTRY OF HEALTH

challenge, towards recognising its profound social, economic and cultural dimensions. If translated into practice it will mark a major breakthrough in the fight against the epidemic. Indications are that it will be. The national strategic plan builds on the National Policy on HIV and AIDS and calls for concerted action from all sectors, with the Ministry of Health and the National AIDS Coordinating Agency (NACA) providing leadership.

But enormous challenges remain. Recent experiences in some neighbouring countries suggest that the integrity and authority of a structure like the NACA has to be respected. Furthermore, integrating other Government departments and civil society entities into a multi-sectoral response is easier said than done. As many other countries have discovered, the initial decision to lodge a response in the health department tends to discourage other departments from assuming their responsibilities for many years thereafter. And finally, there is need to ensure adequate involvement from the private sector, whose initial response was sluggish.

BRINGING IT TOGETHER – THE DISTRICT-LEVEL RESPONSE

As part of the national response, district and sub-district multi-sectoral AIDS committees (DMSAC) have been created, some of which are reported to be functioning well. Their main role is to co-ordinate and promote response programmes at the local Government level. District Development Committees (DDCs) will support the DMSACS by harmonising NGO activities with Government programmes at the community level. The interface between local Government and community level institutions is not always smooth on account of a fairly complex institutional framework for HIV and AIDS response at the district level. As a result, confusion about responsibilities, authority and accountability frequently arises. With adequate resources

(human, material and financial), effective co-ordination, clearer delineation of roles and responsibilities, and possibly even incentives, these structures can significantly boost an expanded HIV and AIDS response.

BRINGING IT HOME - COMMUNITY HOME-BASED CARE

The potential of combining state resources and support with local and community-based initiatives is obvious in Community Home-Based Care (CHBC) projects. In these projects, care is provided to individuals in their homes by their families, who are in turn supported by social welfare officers and the wider community. The CHBC concept was introduced in 1992 when it became clear that public hospitals were not coping with the increasing number of AIDS patients.

The development of a CHBC system began two years later. The first two pilot projects started in 1995 in Tutume and Molepolole. Unfortunately, they lasted only a year, in part because of lack of support. Although seriously understaffed, a special CHBC section of the AIDS/STD unit was later set up to assist districts that wanted to establish CHBC projects.

Both the concept and the reality gives some cause for optimism, but the extension of CHBC across Botswana has proved uneven, especially in rural areas. More often than not, family members have had to care for relatives living with HIV and AIDS without the support or counselling an active CHBC system could offer. Nevertheless, several CHBC programmes – mostly run by NGOs – have been set up. They include projects in Bobirwa (see box 3.2), Kgatleng, Tutume, Bamalete Lutheran Mission Hospice, Princess Marina Hospital, Gabane, Molepolole and the Holy Cross Hospice. The volunteers in all these projects are predominantly women.

Poverty poses serious problems for CHBC. With 47% of the population reported to have been living in poverty in 1993/94, home-based care faces tough ethical problems. For households that live in over-crowded accommodation in poor urban areas or in parts of the country where sanitary conditions are far from adequate, home-based care poses a real danger to both the patient and caregivers. In Shakawe for instance, many reed huts are crowded in small areas and although the village is very dusty, pit latrines are luxuries. With their immunity already compromised, people living with HIV and AIDS face heightened risks of infection in such areas.

Two Government ministries, Health and Local Government, share responsibility for the care and welfare of orphans and AIDS patients. The Social and Community Development Department of the Ministry of Local Government is responsible for providing food rations for orphans and AIDS patients on home-based care. As well, the Ministry of Health provides AIDS patients on HBC with gloves, bed pans, disposable nappies, detergents and more.

A recent evaluation of Home Based Care projects in Molepolole the Tutume sub-districts and Gabane found that patients and their caregivers appreciated the project services and rated them highly in terms of communication, provision of care, extent of support, and the referral system. Problems, though, included the lack of transport, staff shortages and insufficient funds to pay for patients' food, toiletry and bedding.

The study recommended that the Government should provide community home-based care packages, as well as financial assistance for community efforts. Food is indeed being provided for PLWA and orphans. However PLWA are also eligible for welfare support for destitute people if they satisfy the criteria. In addition, members of support groups working on HBC projects are given a monthly transport allowance of P100.

The ASU has a sub-unit tasked with home-based care and co-ordinating NGO and CBO activities. Still, sufficient support for volunteer caregivers is lacking (see text box 3.3). A 1996 baseline study on community home-based care found that only 12% of care-givers received material support from the Government and only 8% from churches. No families received financial support, yet all

BOX 3.2

THE BOBIRWA HOME-BASED CARE PROJECT

The communities of the Bobirwa sub-district were quick off the mark. In 1994, a group of women in Bobonong village joined forces to form a team of community volunteers who would tackle the HIV and AIDS epidemic.

At first, they worked at providing information, educating neighbours, distributing condoms and providing some home-based care.

As AIDS cases multiplied, their workload grew heavier. So they approached a foreign funder for help. It obliged. Soon they were extending their project to four other villages. The emphasis was on home-based care. In order to ensure that the project survived beyond the funding period, the Central District Council became an official partner in their path-breaking work.

Three years later, the women had developed a best-practice model that became the basis for a country-wide community home-based care programme.

caretakers had listed financial and material support as their major needs. This suggests that the potential of home-based care has to be measured against the limited capacities of poor households to provide such care consistently and efficiently.

THE NGO RESPONSE

Many NGOs and Community-Based Organisations (CBOs) have responded well, often by supporting community home-based care projects. They are also active in awareness-building and information dissemination, much of it focusing on youth. A few examples should be mentioned.

* The Botswana Family Welfare Association works especially with the youth. At its centres, youth are offered a wide range of services that include reproductive health education through peers, counselling and contraceptives. The centres also organise recreational activities.
* Teenage mothers are the target group of the Botswana Young Women's Christian Association. It offers them education and career opportunities, as well as affordable day-care facilities. Its peer counselling section provides sex and reproductive health education for youth.
* Much of the work of the Society of Women and AIDS is aimed at enabling women and girl children to achieve their rights to quality sexual and reproductive health care. It trains women and men on gender and HIV and AIDS issues, and on caring for PLWA.
* Population Services International is an international NGO that promotes responsible sexuality and condom use through innovative, youth-friendly media campaigns.
* The Reetsanang Drama group, one of those that work closely with PSI, uses community theatre as a tool to spread the message of AIDS prevention across the country.
* Set up in 1974, the Botswana National Youth Council is the main body that co-ordinates youth programmes run by NGOs, the private sector and the Government. It is meant to advise the Government on youth issues and collaborate with NGOs.

Yet, there still are too few youth-friendly reproductive health services in Botswana. As a result, resistance to condom use is not being broken down as widely and as rapidly as is desired. Moreover, there is evidence that the youth are often confronted with moralising and judgmental attitudes from health workers when they seek condoms, treatment for STDs, or other services that relate to their sexual behaviour. This is clearly counter-productive.

* The Botswana Network of AIDS Service Organisations (BONASO) is a body whose main function is to co-ordinate the activities of NGOs and CBOs dealing with HIV and AIDS. Capacity-building among NGOs and, especially, rural CBOs rank among its priorities. It also has to ensure that projects run by NGOs and CBOs are properly monitored and evaluated. Unfortunately, BONASO itself lacks capacity and is struggling to support its member organisations. Funds are being sought to remedy the situation.

Both the quality and length of life of a person living with HIV and AIDS can be increased significantly and at relatively low cost by the state working in close collaboration with NGOs. Response towards this end would normally be geared at providing inexpensive drugs that deal with opportunistic infections; improving basic health and nutrition standards; extending psychosocial support; and expanding home-based care with the support of church, community and similar organisations.

BOX 3.3

EASING THE BURDEN

Tsholofelo Dibeela, Gakekgatlhege Lekgotla and Khumoetsile Sesiyane belong to a group of 21 volunteers who care for AIDS patients. With one exception, they're all women.

They visit in groups. So they can divide the tasks – feeding or bathing patients, counselling, collecting wood and water, or doing laundry – amongst themselves. Sometimes, families leave all the chores to them.

They keep record of their visits, which allows them to assess current and future needs of the patient and his or her children.

Most patients know their HIV status, but don't tell their families or caregivers. Some open up after a few visits and say they have an "incurable disease". "In some cases, family members do know that their patient has AIDS but they keep it secret out of shame," says Lekgotla.

These three volunteers say they haven't taken a break from their work since they started. They don't fear possible infection during care, and they're confident about what they do. "We have the necessary materials like heavy duty gloves, disposable gloves and gowns, but we do need masks," says Sesiyane.

They love the work, they say. But they feel helpless and disheartened by the poverty their patients live in.

Challenges Faced by NGOs

Lack of financial support is probably the single biggest challenge facing NGOs and CBOs. In recent years, Botswana's middle-income status has prompted many donors to withdraw from the country. This has left many NGOs without the technical and financial capacity to meet rising demand for their services. This financial insecurity is fuelling high staff turnovers – causing the loss of institutional experience and memory.

A second challenge relates to monitoring and evaluation. Generally, monitoring and evaluation do not count among the strengths of Botswana NGOs and CBOs. As a result, successful projects and best practice models are not replicated as widely as they should be. Other difficulties include transport and shortage of appropriate training materials that target groups like out-of-school youths, that are not catered for in mainstream campaigns.

The work of NGOs and CBOs is also made more difficult by inefficient interface with Government. In 1999, for example, the Government announced a package of services available to support group members, PLWA and orphans. Almost a year later, however, many of the potential beneficiaries were still waiting. The NGO/CBO sector and Government departments had failed to develop strong synergies to move their common agenda forward.

BOX 3.4

IN THE SPOTLIGHT

More than a thousand people gathered in the main *Kgotla* in Goodhope village to watch three plays about how HIV and AIDS affects women and young people. They had been created by the community, which also performed them.

It had started with a workshop organised by Reetsanang Association of Community Drama Groups and local district officials.

"These are serious issues and we look at them in an aggressive, critical way," says Reetsanang's James Chitukuta. "If the performance becomes pure entertainment it has no meaning. We want to touch people's hearts and minds and make them think."

Reetsanang deliberately targeted Goodhope. A lot of young people live in the village, which lies on one of the main trucking routes between South Africa and Botswana.

"Between January and August 1999, 124 people had tests for HIV – 103 tested positive and they were all in the 14 to 40 age group," says Chitukuta.

All in all, Reetsanang co-ordinates the work of 78 theatre groups countrywide, involving 2,500 artists. It was founded in 1986 as a tool for development education. HIV and AIDS became its top priority in 1997.

"We are proud of what we are doing. People are so enthusiastic about the workshops and performances they keep coming and asking us to do more," says Chitukuta. "AIDS is ruthless, the number one killer. I myself have lost family and friends. Of the 15 who were in my college class together, all of them are gone. I am the last one."

BOX 3.5

SECURE THE FUTURE

In 1999, a multinational pharmaceutical company, Bristol Myers Squibb, announced a programme to support NGOs that are tackling the AIDS epidemic in five southern African countries, including Botswana.

Titled 'Secure the Future', the programme has a five-year, US$100-million budget. One of its aims is to bolster community outreach programmes that are run by NGOs.

Only two Botswana NGOs have benefited from the fund: the Reetsanang Drama Group and the Botswana Christian AIDS Intervention Programme (which provides counselling services). Several other organisations (including BONASO) have applied for funding and are hoping their requests will be approved.

The Government appreciates the importance of the NGO sector in the national response to the HIV and AIDS epidemic in particular and for Botswana's development in general. Perhaps the biggest stumbling block for a stronger partnership has been the absence of a lucid and strong NGO policy. Fortunately, that obstacle is being cleared. An NGO/CBO policy has been finalised and submitted to the Government for approval. It promises to boost the partnership in all spheres of development, including in the response to HIV and AIDS.

The Government has also set up a fund to support NGOs and CBOs working against HIV and AIDS, while an NGO co-ordinator has been appointed in the AIDS/STD Unit. Still, it must be stressed that for the full potential of the NGO/CBO sector to help stem the epidemic to be unleashed, three breakthroughs are especially needed.

First, clear ground rules for a stronger and more effective partnership with the Government must be developed. Second, the human and financial resource base of NGOs must be strengthened. It is regrettable that when some donors decided to leave Botswana on account of its progression to middle income status, little consideration was given to the fact that most of Botswana's wealth is held by Government and the private sector is too small to support an effective NGO sector. Finally, NGOs must get their act together. They must build synergies and monitor and evaluate their work rigorously if they expect the Government and the donor community to take them seriously.

PRIVATE SECTOR RESPONSE

Human resource management is an integral part of an organisation's competitive advantage. Acknowledging and responding to the effects of HIV and AIDS on workers forms part of the evolving employer-employee

BOX 3.6

TACKLING HIV AND AIDS HEAD-ON AT KALAHARI BREWERIES LIMITED

"It is in our interest to look after our workforce," says Tselanngwe Matlhaku, Human resources director at Kgalagadi Breweries Limited.

The company, which employs 690 workers, has brought a holistic approach to its HIV and AIDS programme. It focuses on prevention and care and includes a detailed package of benefits for workers who are living with HIV and AIDS. The services are backed up with information and advice.

The company runs an on-site clinic and a smaller unit for treating basic illnesses and injuries. "We set up the clinics because staff were losing valuable time attending Government clinics," says Matlhaku. A company nurse counsels the long-distance truck drivers about HIV transmission and how to avoid infection.

Worker benefits include an ill-health retirement package that offers a pro-rated gratuity pay-out and 100% medical aid contribution for the rest of a worker's life. A revised pension fund is now compulsory for all new employees.

In terms of staffing, the company is trying to create a buffer workforce, rather than sack workers. "They are multi skilled and remain full-time employees who fill in wherever possible," says Matlhaku. Whilst it was initial seen as cost, the pool is now seen to yield an above cost production benefit.

SOURCE: KBL 2000

relationship. As more productive workers become infected with HIV, many companies are seeing the need to intervene and prevent HIV transmission, set up schemes and policies to assist workers, and contribute to wider community responses. To that end, the Botswana Business Coalition on AIDS (BBCA) was set up a few years ago.

One of the prerequisites for a planned private sector response is the creation of frameworks that map workers' and employers' rights and duties in relation to HIV and AIDS. A Southern African Development Community (SADC) Code on AIDS and Employment was adopted by the SADC member Governments, employers and labour organisations in 1997 as the basis for such frameworks. Company activities on this front can be grouped into four areas of intervention:

* *HIV prevention and health promotion.*

Despite high infection rates, most people are not infected with HIV. Prevention remains essential and ranks at the top as the most effective response to the epidemic.

* *Managing ill health.*

This means not only improving the health of people with HIV, but also that of other workers. It requires facilitating access to primary medical services, nutritional programmes and the provision of medical aid schemes

* *Employee benefits and survivor support.*

For many companies, the effect of HIV and AIDS will be reflected in higher employee health care spending and benefit claims and declining employee productivity due to ill health and absenteeism. Their responses vary. But they include assessing benefits structures to see whether they offer adequate ill health retirement packages.

Some companies have introduced medical insurance that continues after termination of employment or until both spouses die. Other options have included combining insurance and pension funds, and co-financing the benefits. When the demand for retirement pensions has dropped, reserves are sometimes shifted to ill-health retirement (where demand is higher). Companies have also switched from individual to group life assurance to pool risk, reduce costs and build reserve funds.

BOX 3.7

PUBLIC ENTERPRISES: WATER UTILITIES CORPORATION.

The Water Utilities Corporation drafted its AIDS policy in 1994 – a year after the Government's first National AIDS Policy was formulated.

At the time, there was still a lot of disbelief about AIDS. But as more people were affected the response improved. The programme works through a network of departmental representatives who have been trained as peer educators.

They focus on transmission, prevention and how to deal with HIV-positive colleagues. Interestingly, workers seem to prefer outside counsellors – an indication that they don't believe their discussion with in-house counsellors will stay confidential.

The AIDS programme is wide-ranging. Condoms are available in all staff toilets, a peer support scheme has been established, and speakers regularly address workers on HIV and AIDS issues.

Although the parastatal's programme has not yet been evaluated, the corporation feels it is a success. All the workers know about HIV and AIDS, how the virus is transmitted, and how it can be prevented, says a senior personnel officer.

But it is difficult to tell whether the programme is changing sexual behaviour. "People take the condoms, but whether they use them or not is another question," she says.

SOURCE: WUC 2000

* *Monitoring and Evaluation.*

These are critical, but sometimes overlooked aspects. Not only do they allow mistakes to be corrected and flaws to be removed from programmes, they can motivate and shape other companies' interventions. The most innovative companies realise they also have to audit their changing situations as the AIDS epidemic takes hold. Routine monitoring has to inform planning.

COULD IT HAVE BEEN DONE BETTER?

There can be no doubt that the leadership in Botswana - political, corporate, religious and traditional - is taking the AIDS challenge seriously even if areas of emphasis sometimes differ. Presently, the Government funds more than 80% of the cost of national HIV and AIDS prevention and control activities in Botswana. Among developing countries only the Governments of Thailand and Uganda have made comparable investment in national response,

BOX 3.8

DEBSWANA DIAMOND COMPANY

"To kick off our HIV and AIDS campaign at one of the Debswana Diamond Company mines in 1991, we included a condom with every payslip. This of course stirred some discussion in the community. One individual actually came and asked if we were suggesting that he was unfaithful", says Tsetsele Fantan, Director, HIV and AIDS Impact Management.

After the first HIV and AIDS-related illness and deaths were reported at the Debswana hospitals in 1987 and 1989, the company embarked on an education and awareness programme. It is company policy to protect the health and safety of employees and it makes good business sense. The programme was initially driven by nurses and doctors and directed at other health care workers but was subsequently was rolled out to include the employees and their teenage children.

Full time HIV and AIDS programme co-ordinators were appointed at the Jwaneng and Orapa mines in 1991 and 1992 respectively. This was done to formalise the AIDS programme and to have full time resource personnel for the dissemination of information, counselling and education. The HIV and AIDS management policy was based on the company's health and safety regulations. The policy also served as a basis for an education and prevention programme and more importantly to articulate Debswana's position on employees who are living with the virus. The policy further spells out the specific responsibilities of the human resource committee, executive committee, line managers and supervisors, chief medical officer, AIDS co-ordinator, support group and individual employees. Employees, their families and co-workers are encouraged to seek assistance from established community support and counselling groups.

What underpins the company's HIV policy is the equal treatment of all potential and current employees with regard to their HIV status. PLWA are accorded the same rights, facilities, benefits and opportunities as those with other life threatening illnesses.

The company does not require applicants for employment or current employees to undergo HIV-testing but employees are encouraged to go for voluntary HIV-testing and counselling. Perhaps controversially, Debswana, which to a large extent has to fund the training of its skilled human resources, introduced HIV testing of potential Debswana apprenticeship and scholarship recipients in 1999. From Debswana's point of view it is a way of safeguarding the company's investment, but Tsetsele stressed that the mandatory testing should also be viewed as an incentive for young people to remain HIV-negative. "Young people know that there are two things they need to do to get a scholarship from us, get good grades and stay HIV-negative".

The underlying problem for Debswana is that the epidemic is contributing to rising human and financial costs. In 1999 59.1% of deaths and 75% of ill health retirements within the company were directly attributed to AIDS-related causes. Moreover sick leave and absenteeism are increasing rapidly, adding to the operational costs of the company. The HIV prevalence rate at Debswana in May 1999 was 28.8%, which roughly corresponds to the national figure. Significantly, 75% of the employees participated in the study.

Debswana has recently done an institutional audit and one of the objectives was to identify jobs which are core to the mining and processing of diamonds. The audit furthermore was undertaken to examine the implications of the increase in morbidity and mortality for the company's liabilities and future cost. These include increased demand for health care, productivity losses, and implications for staff morale and the business environment. In addition to the institutional audit, a study on knowledge, attitude and practices and an evaluation of HIV policies and practices were conducted.

The information obtained from the studies and evaluations will inform a new HIV and AIDS strategy for the company. The strategy would include an enhanced education and prevention programme that promotes healthy lifestyles, is based in the community and focuses on the youth. It will emphasise the importance of voluntary counselling and testing for better self-management. Moreover, Debswana intends to work more closely with those stakeholders who play an important role in its HIV and AIDS strategies and programmes, including the labour union. The company is in fact contemplating developing a policy that will compel organisations providing goods and services to Debswana to have an HIV and AIDS policy. It also plans to intensify information sharing and communication to the general public. Regular press briefings on the company's HIV and AIDS programmes will form an important part of this strategy.

SOURCE: DEBSWANA

reduced their dependence on foreign donors and promoted national "ownership" of the national response programme. On 29 October, 2000, President Mogae launched a comprehensive social mobilisation campaign on HIV and AIDS awareness.

Consciousness about HIV and AIDS is high. A member of Parliament has walked 120 kilometres to raise funds for HIV and AIDS programmes. The international community and the private sector have responded positively. But this is a challenge against which no amount of effort could have been enough unless it produced a cure.

Halting the HIV and AIDS epidemic and creating an AIDS-Free generation is a mammoth task. Many constraints and hurdles remain. The challenge now is to surmount them quickly and decisively. The response to this national emergency has to extend throughout the state and across the entire public sphere, encompassing all civil society organisations and the private sector. For Botswana, it means nothing less than taking destiny into its own hands. When all is said and done, the people of Botswana need not despair into a sense of hopelessness.

The Government did well under conditions of limited understanding of the epidemic. The understanding of HIV and AIDS is now substantial and after more than a decade of relentless effort, Botswana citizens, corporate and human, must muster sufficient effort to overcome the epidemic. That means rallying behind the comprehensive effort by the Government and its partners. The epidemic can and will be overcome.

LESSONS FOR THE FUTURE

There is a lot that Botswana can learn from its own experience with HIV and AIDS and the experiences of other developing countries, particularly Uganda. Recent developments suggest that these lessons have been well learnt and are being put to good use. Nonetheless they are worth repeating for emphasis. They are, in no particular order of significance:

1. A multi-sectoral, multilevel and integrated approach works better than health-centred measures of the type Botswana employed in its early response.
2. Open and widespread discussion of the problems of HIV and AIDS is important. Whereas the Government of Botswana acknowledged the problem very early on, the wider society has been very slow to open up and speak with candour about the problem. Even though AIDS is the likely cause of the majority deaths in Botswana, it is seldom acknowledged as the cause of death at funerals. Measures currently underway to make AIDS a notifiable disease are thus welcome, especially since this will be done on a need to know basis.
3. Going to scale is the best approach. Tentative and under-resourced responses are ineffective and always lead to waste in the long run.
4. Strong leadership commitment is indispensable. In Uganda, sustained financial and technical support from multilateral agencies, bilateral donors and private foundations made a large-scale response possible.

Botswana is fortunately now at the stage where a truly large-scale response, underpinned by the fulfilment of all these conditions is possible.

ILLUSTRATIVE OPTIONS

The future is about preserving human development gains made so far

CHAPTER 4

THE WAY FORWARD

There is no moral truism with greater cogency, no science with better value, nor economics with greater viability than saving people... A multi-sectoral approach involving everybody is the key and Africa's perception of its being is its strongest foundation

- Marvellous Mhloyi -
Centre for Population Studies, University of Zimbabwe

With about 300,000 Batswana, roughly 20% of the total population, expected to be infected with HIV by the end of Year 2000, Botswana has already experienced an HIV epidemic and is set to experience an AIDS epidemic replete with untold human misery and suffering. The age group 25-29 has the highest mortality rate for any age cohort of equal breadth between ages 1 and 65. This is firmly indicative of the outbreak of an AIDS epidemic. With about 85 Batswana being infected with HIV every day, the impressive human developmental gains of the past 34 years will suffer a severe setback.

Treatment, care and counselling to ensure a dignified existence for people living with HIV and AIDS should be high on Botswana's priorities for action but the Vision 2016 ideal of no new infections by 2016 is achievable only if the majority of Batswana who are not already infected, remain HIV-negative. This is Botswana's hope for an AIDS-Free generation by 2016.

THE WAY FORWARD - A THREE-PRONGED APPROACH.

This report recommends a three-pronged approach for a response to the HIV and AIDS epidemic in the country. The approach is very consistent with MTP II. The elements of the three-pronged approach are;

1. Action to increase the likelihood of achieving an AIDS-Free generation by 2016: This requires a systematic and persistent assault on the immediate factors behind the spread of HIV and AIDS - behaviour that increases risk of infection - and the underlying determinants of the epidemic. The underlying determinants are, as discussed in Chapter 2, the factors that predispose people towards risky behaviour.

2. Action to promote a humane and compassionate response to the situation of the 300,000 people that are already living with HIV and AIDS, and their families: Two desirable outcomes will be secured as a result. First, people living with HIV and AIDS will be accorded opportunities for longer, dignified and productive lives. Second, incentives will be created for people to know their HIV status, thus bringing the epidemic out into the open, where it can be dealt with more effectively.

3. Action to mobilise all sectors to mitigate the impact on human development: Measures are already in motion. The President's office has assumed political leadership of the campaign to expand awareness, mobilise action and resources from all sectors and change people's attitudes and behaviour in respect of sex and sexuality.

These mutually reinforcing measures can be summed up as:

* PREVENT
* TREAT & CARE
* DEVELOP

Can it be done?

Can an AIDS-Free generation be achieved in Botswana by 2016. The answer has to be an emphatic "YES" for the following reasons.

* Compared to many other developing countries, Botswana is endowed with good institutional and financial capacity at all levels. These must be fully mobilised to respond to the epidemic. The leadership, knowledge, toil, commitment and resources that enabled 30 years of steady progress in human and economic development must now be brought to bear on the HIV and AIDS epidemic. In some instances, for example prisons and commercial sex-work, tough decisions that go against convention, custom and religion will have to be made to allow these institutions to function better in responding to HIV and AIDS.

* The Government of Botswana has a good record in crisis management. It has in the past dealt successfully with national emergencies such as recurring droughts and the cattle lung disease. Admittedly, the HIV and AIDS epidemic is a crisis of a different type because it involves people dying in unprecedented numbers but applying a disaster management model could help accelerate and better co-ordinate the institutional and policy response to HIV and AIDS in Botswana. The real challenge in this regard is to avoid panic. The crisis requires willpower, committed leadership and resources to be brought to bear on the epidemic within a well-defined and well-managed multi-sectoral strategy.

* From an epidemiological perspective, there are several emboldening reasons why the goal of an AIDS-Free generation can be reached. Except for those who are born with HIV on account of mother to child transmission, all children will remain HIV-negative until they have sex with someone who is HIV-positive or contaminated blood enters their bodies. The sex will be either forced or consensual. Because the AIDS epidemic in Botswana is transmitted from one generation to the other mainly through inter-generational sex, decisive action to break the intergenerational sex link is the key to AIDS-Free generation.

Successive generations of young Batswana must be enabled to remain HIV-negative. That requires more than providing condoms and preaching safe sex. A social revolution is necessary.

In 1999, the population of Batswana aged 15 years and below was estimated at 668,640. Of these, less than 2%, or about 10,000 people, are currently living with HIV and AIDS. Several behavioural studies in the Southern African region have revealed a consistent pattern of young girls having sex with men who are, on average, 10 years older. The HIV prevalence rates for Botswana and the sugar daddy syndrome suggest that similar practice may be

BOX 4.1

LEARNING FROM OTHER SUCCESS STORIES

Three of the more frequently cited 'success stories' in responding to HIV and AIDS are Thailand, Uganda and Senegal. The lessons to be drawn from the experiences of these countries are:

* The combination of vigorous political leadership and financial commitment is central to the success of awareness and behavioural change campaigns. Industrialised countries and multilateral agencies were persuaded to support the AIDS response. Botswana is presently receiving substantial financial support from external sources.

* In Senegal and Thailand, there was an early start to interventions whilst in Uganda, prevalence rates rose to very high levels before coming down. Among women aged 15-19 prevalence rates rose to 32.2% in 1991 before falling to 10.3% in 1999. The lessons from these three countries are that both early and late responses do work but the price to pay is different. Senegal and Thailand may never experience an AIDS epidemic. Uganda did.

* Large-scale initiatives, involving all the relevant sectors, including churches and business, bear fruit. Significantly, in all three countries, the responses were directed at prevention and care. In Senegal and Thailand, this included strong programmes to control sexually transmitted diseases (STDs). Sound technical strategies were devised and applied.

* Good systems of data collection and analysis underpinned national responses.

HIV flourishes in silence and denial. All the three countries have shown that an effective response has to pierce stigma, secrecy and denial. That duty rests with all Batswana - but most of all it is people with public profiles - political, religious, community and traditional leaders, along with celebrities - who can influence society through speech and behaviour

SOURCE: UNAIDS 2000

common in Botswana as well. The spread of the virus could be reduced substantially by preventing HIV transmission from the adult men to young girls.

PREVENTION

Eliminate Intergenerational transmission of HIV

This report has consistently stressed that the epidemic is being passed from generation to generation primarily through sex between older men and young girls. Preventing HIV transmission from older men to young girls is a prerequisite for an AIDS-Free generation in Botswana. In this regard there is need for consolidation of efforts to:

Transform attitudes

A society-wide transformation of norms and attitudes must be achieved. A social revolution of sorts must happen. Leaders - in politics, business, religious organisations, youth and traditional structures - must mobilise their constituencies and the nation to develop attitudes and practices that help contain the spread of HIV and AIDS. In meeting that challenge, due regard should be given to the following requirements of an effective social movement:

- clearly defined issues and messages:
- a sustained and co-ordinated dialogue and,
- distinct roles and duties for each of the movement's partners.

A top priority therefore should be the creation of an enabling environment for dynamic community action to prevent HIV infection and deal with the impact of AIDS.

A new dialogue

It is recommended that the President should initiate dialogue with leaders in politics, Chiefs, business communities, religious bodies, academia, the youth and the broader society, on a vision for an AIDS-Free generation and focusing on breaking down the structural determinants of the spread of HIV and AIDS.

Bury the myths

This dialogue must expose and publicise the reality of intergenerational sex and HIV transmission and the apparent contradiction between sex between older men and young girls on the one hand and Tswana culture on the other. It must also bury the myths surrounding sex. This entails explicitly acknowledging, refuting and condemning these behaviours and myths.

Patriotic duties

Political, religious and traditional leaders should be at the fore of a tide of sentiment and action that shames older men who have sex with minors. A sense of patriotic duty could be a valuable ingredient of such a bid to discourage HIV transmission to the young.

Eliminate Discrimination

Discriminatory and overly value-laden laws should be reviewed if their existence in their present forms violates the rights of others to protection from HIV infection. The incidence of sex between men requires condoms to be availed in prisons. A new perspective on commercial sex-work that recognises it as a way of earning a living is a reality in Botswana. As long as it remains an illegal and unregulated business, measures specific to the sector cannot be undertaken. Similarly, acknowledgement of the existence of homosexual sex in prisons would pave the way for condoms to be distributed in prisons.

A new social movement

The political, traditional and religious leaderships of Botswana together must generate and enable a society-wide movement that makes it possible - and desirable - for young people to delay their sexual debuts. This can massively reduce their vulnerability to HIV infection.

Bolster and enforce laws

Leaders should generate a social movement that compels the enforcement of laws against sexual harassment, especially of minors at home and in schools, colleges and the work place. Laws must be strengthened and enforced to stop older men from having sex with minors. This should include the training of staff in police stations on how to handle victims of sexual abuse, and the establishment of special child friendly courts.

Poverty, inequality and gender discrimination

The link between inequality, poverty and gender discrimination on the one hand and HIV and AIDS on the other is very strong. An adequate appreciation of this must feed into the design of an anti-poverty programme. Evidence suggests a very strong link between the dependence of women on men and their susceptibility to HIV infection.

Support women

More and better programmes must be introduced to enable women to avoid having to survive through high-risk activities. These measures should include greater access to micro-finance and business support schemes, as well as broadening women's education opportunities.

Talk about it.

Sex education must be improved and broadened, especially through the education system. Given the dynamics of HIV and AIDS, the silence surrounding sex is deadly. Leaders at all levels of society must constantly encourage - by way of example - openness and candour about HIV and AIDS and sexuality. In Uganda, stigma and discrimination were overcome. In Botswana they still form formidable barriers to open discussion on HIV and AIDS. About a third of adults are living with HIV and AIDS, yet only a fraction of them know their status. It is not even mentioned at funerals.

Voluntary counselling and testing

People must be encouraged to go for voluntary counselling and testing. But people will be more willing to go for voluntary counselling and testing if there are incentives for them to do so. Improved access to anti-retroviral therapy could raise the uptake of VCT services. Numerous studies confirm that people will opt for voluntary counselling and testing if they know treatment is available.

People living with HIV and AIDS at the fore

In all these respects, people living with HIV and AIDS have a central role. They, perhaps more than anybody else, can generate a social movement with the care, compassion, solidarity and determination that Botswana needs, if it is to achieve an AIDS-Free generation.

The political leadership of Botswana deserves commendation for the commitment and vision it has demonstrated in its response to the epidemic. The challenge now is to effectively translate this into a national mobilisation for concerted and sustained action. The leadership and commitment so far demonstrated is a precondition for an effectively co-ordinated response - within the state, as well as between it and civil society structures. The creation of the NACA is a step in the right direction. The organisation could inject a greater sense of urgency into the response at national and sub-national levels.

Eliminate Infections within Stable Relationships

Large numbers of men and women are being infected with HIV in the context of steady relationships. Clearly, mutual faithfulness is a problem in such relationships. Two of the factors underlying mutual unfaithfulness are poverty, gender inequality and a deterioration of values.

More development and better laws.

The measures should include reform of laws to bolster the status of women in relationships, as well as measures to reduce women's financial dependence on men. Improved access to micro-finance, strengthening women's educational opportunities, including adult and vocational education, are good areas to start with.

Joint voluntary counselling and testing.

Both partners must be encouraged to undergo VCT. There is evidence that when couples go together for VCT, HIV transmission rates tend to drop. This has the added advantage of aiding informed decisions about childbearing. The success of such activities, however, depends also on the availability of preventive therapy for MTCT.

Restoring gender equality

Unequal gender relations shape many of the choices that aid the spread of the HIV and AIDS epidemic. The choices made by men and women in stable relationships are influenced by a variety of factors. An aspect of social mobilisation against HIV and AIDS should aim at facilitating equal participation in decision making by men and women.

Back to Good Values

Whilst in Tswana culture, female promiscuity is viewed more dimly than male promiscuity, Tswana culture does not condone promiscuity in general. An effective response to prevent infections in stable relationships is required. A return to a value system that imposes tough social sanctions on sexual promiscuity is essential.

Zero Tolerance for Rape and Sexual Abuse

HIV transmission can also be reduced by vigorously acting against the rape and sexual abuse of women and children. Botswana's information system reveals that over two-fifths of rape survivors are girls younger than 16 years. Thanks to lobbying by women's and human rights groups, the Government changed the law in 1998 and raised the mandatory sentence for rape from four to ten years of imprisonment - 15 years if the rapist is HIV-positive and is adjudged to have known his/her HIV status. However, conviction rates have remained low.

Special procedures and institutions

The prompt setting up of special courts, staffed by trained personnel, is a priority. Policemen and women and medical personnel who interact with victims of rape have to receive

BOX 4.2

BETTER ACCESS TO NEW TREATMENT - BRAZIL'S EXPERIENCE

Governments in the developing world are demanding fairer access to drugs designed for opportunistic diseases associated with AIDS and the anti-retroviral drugs that slow the progression of the disease and improve the quality of life of people living with HIV and AIDS.

Brazil's policy of universal access to anti-retroviral drugs benefits almost all AIDS patients in the country - about 850,000 people. The therapies have halved the annual number of AIDS deaths and reduced opportunistic infections by 60-80%. The programme would have been impossible if the cost of anti-retroviral drugs had not dropped significantly. How did that happen?

The Government bought imported anti-retrovirals in bulk and developed local capacity to manufacture those that were not patent-protected. This caused huge drops in prices. The annual cost of double therapy with nucleoside analogues fell by an average 80% in 1996-2000, from US$3,812 to US$763). For triple therapies, costs fell 34-36%.

Because many people living with HIV are now staying healthy, the programme has yielded huge medical savings. In 1997-1999, about 146,000 AIDS-related hospitalisations were averted. Condom sales rose by nearly half and demand for voluntary HIV counselling and testing increased by one-third. In Brazil, fears of a trade-off between treatment and prevention efforts were disproved.

Botswana can use articles 6 and 31 of the WTO TRIPS agreement to access the new drugs at even lower prices. Provided the appropriate national legislation is put in place, Botswana can through perfectly legal procedures import anti-retrovirals from countries that already produce generic versions of those drugs.

Along with generous donations and heavily discounted drug prices from pharmaceutical companies, such a move will mean that the cost of new AIDS drugs (and their distribution) will be offset by savings in the healthcare system.

SOURCE: UNAIDS, 2000

better training for these roles. Elsewhere in the Southern African region, the presence of trained social welfare workers at the crime reporting stage and beyond has proved useful. Similarly, child-friendly courts and procedures must be set up for children who have suffered abuse. Until conviction rates in these kinds of cases rise, most survivors will remain reluctant to report the crime or press through with a court process that is often degrading, and the epidemic will continue to spread.

Support human rights and women's NGOs

Financial and human resources should be provided to human rights and women's NGOs to take up the issue of sex with minors and violence against women. This is a challenge not only to the Government, but also to donors and the private sector.

Speak out

Together with political, traditional, religious and community leaderships, NGOs must build a social movement that emphasises the dreadful links between HIV and sexual violence, the violation of women's reproductive rights and gender inequality.

TREATMENT AND CARE

Meet the challenge of new treatment opportunities

The International AIDS Conference in July 2000 marked a turning point in the debate about equitable access to treatment in developing countries - especially for countries with the resources and health infrastructure capacity of Botswana. The challenge is to:

Provide new drug therapies

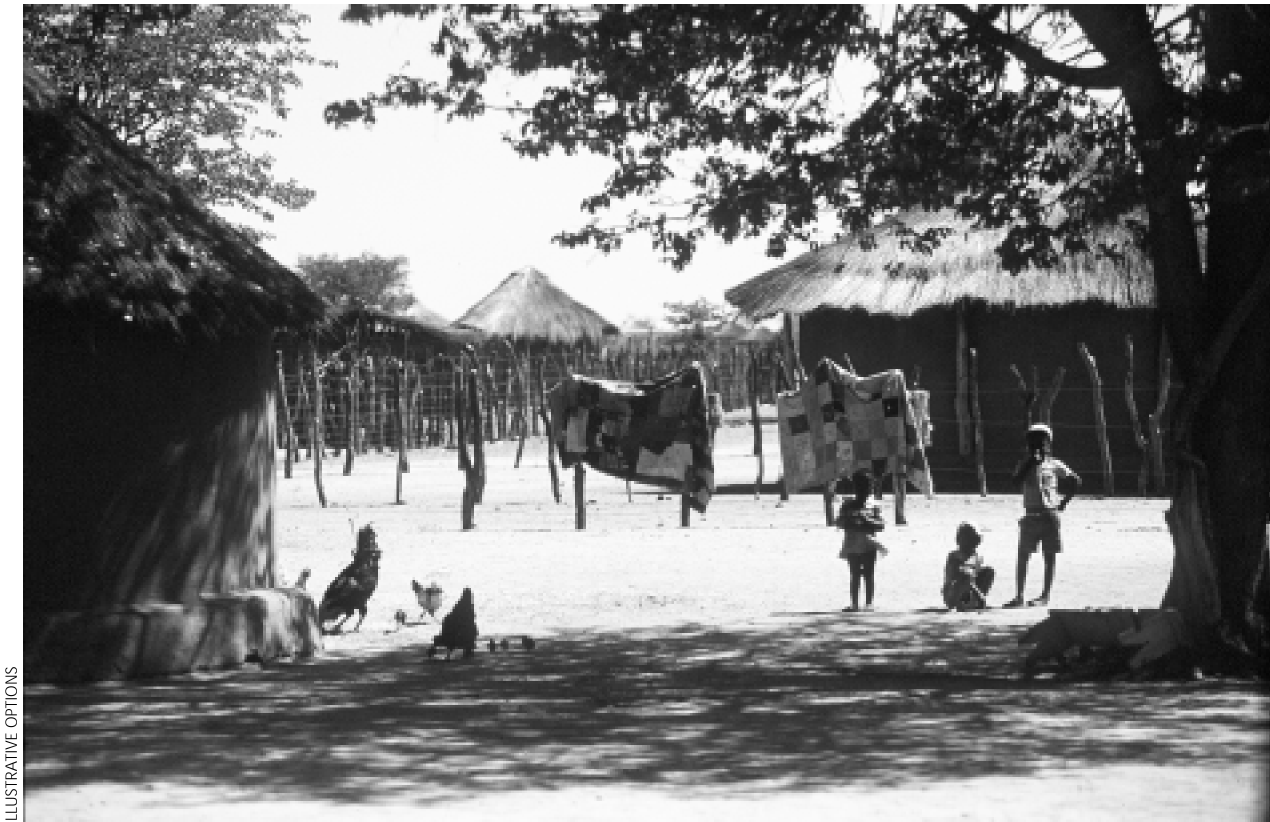
It is recommended that consideration should be given to provision of anti-retroviral drug therapy for PLWA. Text Box 4.2 summarises Brazil's success in slashing drug prices and building the necessary infrastructure and human resource capacity for distributing, administrating and monitoring drug provision and treatment.

Review policies

Policies should be reviewed to regulate the use of active anti-retroviral therapy. Evidence has emerged that some people are already gaining access to these new drugs outside the official health system. However, problems can arise from the unregulated use of complex drug regimens. If people are not guaranteed continued and sustained access to the new drugs (because of supply problems or because they can no longer afford the high prices) and they stop the treatment, there is a risk of generating resistant strains of HIV.

Regulatory measures

The Ministry of Health has already developed guidelines for application of anti-retroviral therapy in Botswana . The public health system should urgently ensure strict application of these guidelines and comprehensive coverage for treatment of opportunistic infections and prophylactic regimens for people living with HIV and AIDS.



ILLUSTRATIVE OPTIONS

Overcoming poverty will help reduce the incidence of HIV.

DEVELOPMENT

Underpinning all recommendations for action against HIV and AIDS is the need to integrate HIV and AIDS response strategies into development and poverty reduction activities. The emphasis of the recommended strategy toward an AIDS-Free generation clearly rests on prevention. But prevention is about more than just convincing people to change their behaviour - it is fundamentally also about enabling them to do so.

In the context of poverty, deprivation, dependency, gender inequality and social value systems that condone discrimination, many people may be unable to refrain from activities that predispose them to HIV infection. The HIV and AIDS epidemic is thus a development problem. From a development perspective, essential measures should include action to:

Overcome poverty and inequality

Central to a successful strategy are bold initiatives to overcome the material, gender and other inequalities that still exist in Botswana. HIV and AIDS prevention and care programmes must be linked with development programmes. As a resource-rich country, Botswana enjoys a potentially huge advantage on this crucial front.

For effective action against poverty, Botswana should strengthen its data on poverty in two respects: level of disaggregation and continuity. Poverty was last measured comprehensively in 1997 for 1993. More regular and disaggregated estimates of the prevalence of poverty are necessary.

Build on awareness

The mid-term review of the National Development Plan 8 seems to adopt precisely such a holistic approach. Along with HIV and AIDS, it identifies economic diversification, job creation, poverty reduction, citizen economic empowerment, policy reform in the public sector, environmental conservation and human resource development as key challenges. It stresses the profound social and economic dimensions of HIV and AIDS, and the need to integrate it into Botswana's development strategy.

Mainstreaming HIV and AIDS is not enough

The challenge goes beyond "mainstreaming" or incorporating HIV and AIDS into the work of different sectors and Government departments. The starting point for an adequate response is the understanding that any bid to halt the AIDS epidemic has to include determined efforts to eradicate poverty and drastically reduce inequalities. Such efforts would include support for greater social mobilisation among the poor, as well as empowerment programmes like micro-finance, small-scale

urban agriculture, household food security projects and other self-employment and job creation activities.

Overall, Botswana's HIV and AIDS strategy will succeed only if its economic growth strategy is characterised by speedier and greater redistribution of assets, income and resources. In both cause and effect, poverty, inequality and the AIDS epidemic are intimately linked.

The Government is to be commended for reviewing and seeking ways to revitalise its poverty alleviation efforts in order to meet the objectives of Vision 2016. This report urges that those efforts be redoubled and be focused also on reducing inequalities.

There is nothing mysterious or puzzling about the passage of HIV and AIDS through Southern Africa and Botswana. There is knowledge about how the virus is transmitted and the cofactors in its spread. There is awareness that a health or medical response alone is insufficient, and that success in containing and reversing the epidemic will depend significantly on how effectively poverty, inequality and gender discrimination are addressed. Botswana is faced with a strong challenge for its resolve to reach the heights of human development and efforts towards this end must be redoubled.

ANNEX 1:
THE AIDS EPIDEMIC IN BOTSWANA

More than 95% of all HIV-positive people live in the developing world, which also accounts for an estimated 95% of all deaths due to AIDS. HIV infection is particularly high in sub-Saharan Africa. In 1999 it was estimated that 70% of the global population of PLWA lived in the region. Furthermore some 11.5 million people in sub-Saharan Africa have died of AIDS. Botswana, Namibia, Swaziland, Zambia and Zimbabwe are the worst affected countries in the region, with HIV prevalence rates of between 20 and 36% in the 15-49 age group.

Since the first reported case of AIDS in Botswana in 1985 HIV has spread rapidly. It is estimated that between 28% (AIDS/STD Unit) and 36% (UNAIDS) of the country's sexually active population is HIV-positive. Sentinel surveillance has been carried out in antenatal clinics since 1992 and the resulting data has been used to produce estimates. Antenatal clinics (ANC) are surveyed annually in Gaborone and Francistown. In other selected sites, clinics are surveyed every other year.

The surveys cover pregnant women attending antenatal clinics, and men with STDs. The average national rate of HIV prevalence among pregnant women is shown in Fig. A1.1, below.

As can be seen, the HIV prevalence in ANC s has more than doubled since 1992. Botswana's 1999 serosurvey of eight sites (Francistown, Gaborone, Serowe/Palapye, Mahalapye, Kgatleng, Chobe, Lobatse and Kgalagadi) returned more disturbing data that confirms the extent of the epidemic.

Of the 2,586 pregnant women tested, 35.88% were found to be HIV seropositive. The highest prevalence was in Chobe (50.83%), Francistown (43%), and Serowe/Palapye (41.79%).

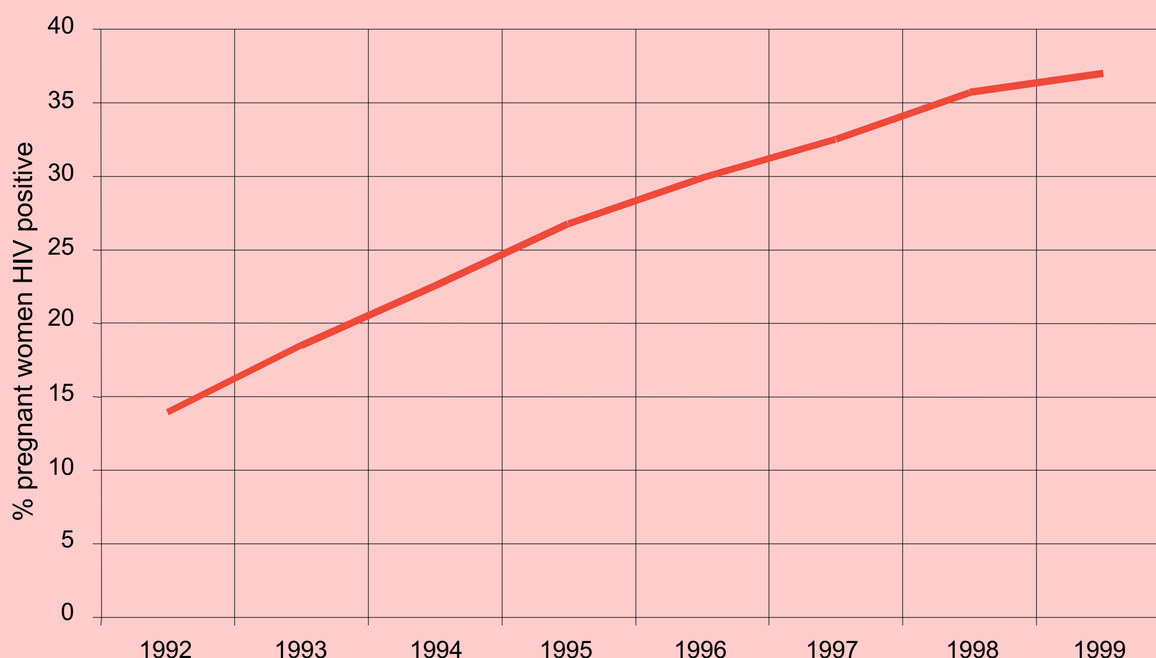
It is estimated that one in every 8 children born is HIV-positive. In the absence of effective anti-retroviral treatment, the vast majority of them are expected to die within a few years. The exact number of orphans in Botswana currently is not known, but the projections are alarming. A study by Abt Associates forecasts that the number of children losing their mother to AIDS is likely to reach between 159,000 to 214,000 by the year 2010. They will constitute about 20% of all children in Botswana.

Also evident is an extremely high correlation between HIV seroprevalence and the presence of other STDs among men, as the following table (documenting 1999 data) shows.

These figures are much higher than they were in the early 1990s. In 1994 in Francistown, for example, the HIV seroprevalence rate among men with other STDs was 29.7%. By 1999, it had risen to 62%. In Gaborone the rate rose from 27.8% to 50.6% during the same period.

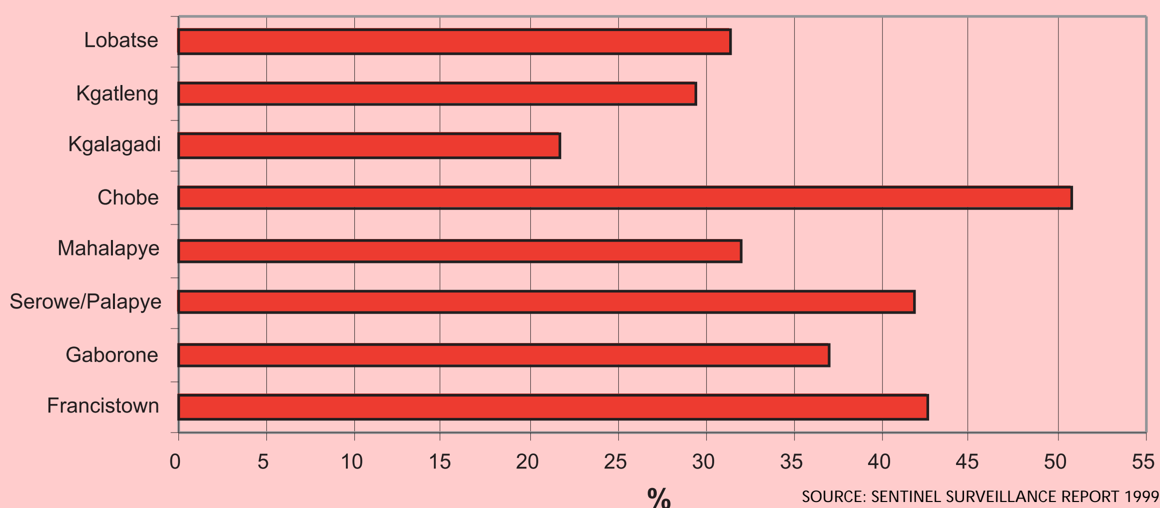
FIGURE A1.1:

NATIONAL HIV PREVALENCE IN ANC CLINICS, BOTSWANA, 1992-1999



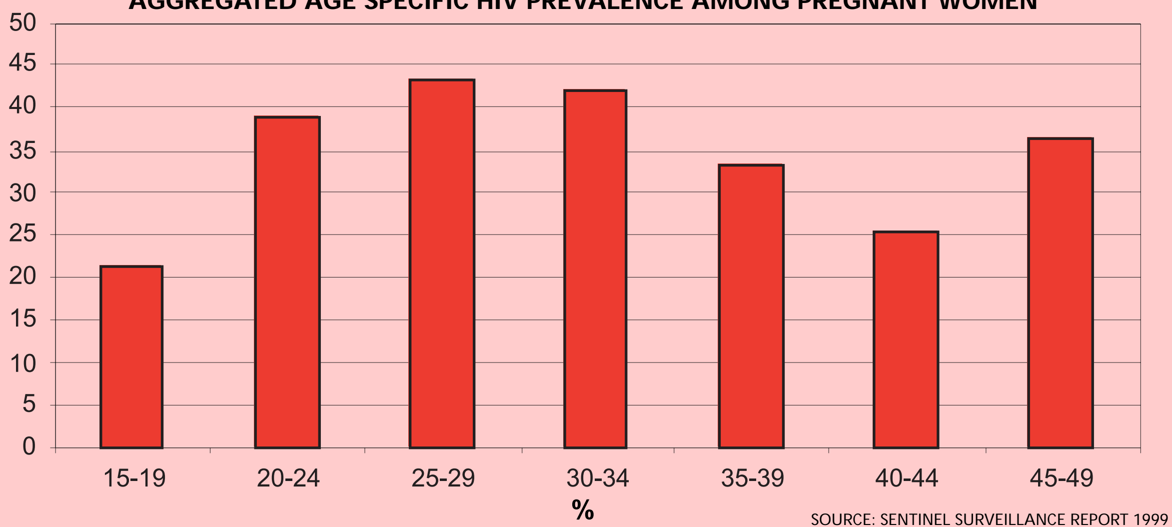
SOURCE: AIDS/STD UNIT, 1992-1999

FIGURE A1.2



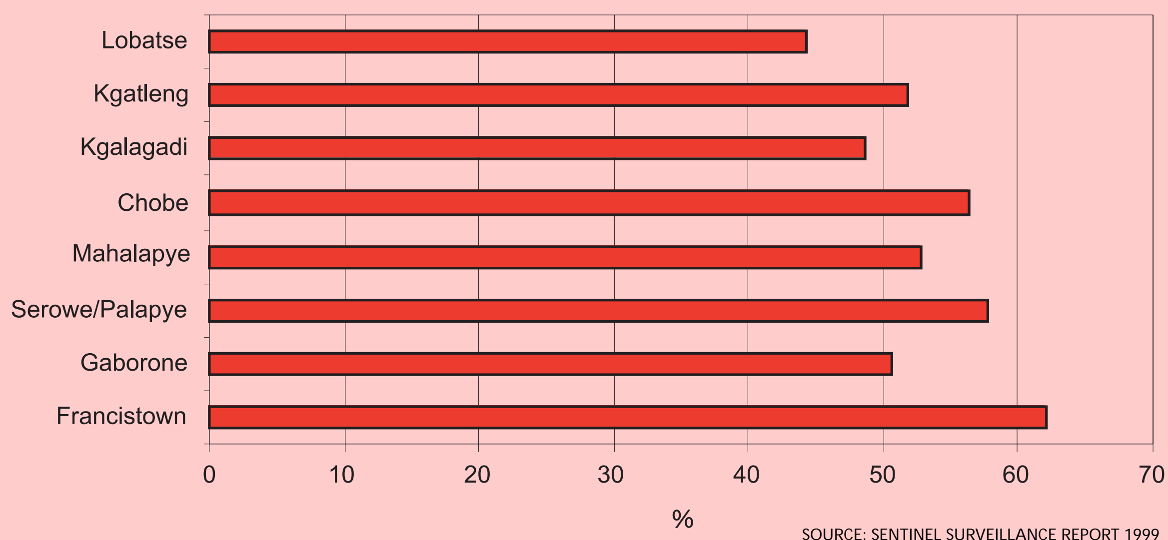
SOURCE: SENTINEL SURVEILLANCE REPORT 1999

FIGURE A1. 3



SOURCE: SENTINEL SURVEILLANCE REPORT 1999

FIGURE A1. 4:



SOURCE: SENTINEL SURVEILLANCE REPORT 1999

ANNEX 2:

THE DEMOGRAPHIC IMPACT OF THE AIDS EPIDEMIC

The period between HIV infection and the onset of chronic AIDS-related illnesses varies from country to country and individual to individual. Key variables influencing the rate of progression from HIV infection to full blown AIDS include poverty, nutrition, access to health care, including anti-retroviral therapy and general living conditions.

In demographic terms, the high HIV prevalence rates observed in Botswana will translate into even higher levels of mortality in the near future. Likewise, current mortality rates reflect levels of HIV prevalence in the recent past. In the absence of a cure – and there is none currently – even 100% effective prevention of HIV infection alone will not alter the delayed effects of previous infection cases.

DATA CONSTRAINTS AND PROJECTION MODELS

Forecasts of the likely demographic impact of HIV and AIDS are based on application of projection models to available data, which in Botswana would be either census, civil registration or survey data. The most recent census in Botswana took place in 1991, before the effects of HIV and AIDS had become evident and is therefore of limited use in making HIV and AIDS related forecasts. Unfortunately, the Civil Registration system (where births and deaths are recorded) is also inaccurate. Its coverage is incomplete and there is significant under-reporting in some areas.

Demographic information can also be gleaned from sample surveys undertaken between national censuses. Although not as accurate as data from a census, survey data can be used to monitor and map demographic trends. The two most recent sample surveys providing demographic information in Botswana were the Family Health Survey (FHS) in 1996, and the Demographic Survey in 1997/98.

When recent information is unavailable or unreliable, projections of future demographic trends are based on projection models. The projections of population, HIV prevalence rates and AIDS cases in this report are based on a version of the Actuarial Society of Southern Africa (ASSA) model, modified for Botswana. This version has been used in previous Botswana impact studies, and has proved to be a robust and appropriate tool. The underlying assumptions about fertility (the number of children per woman) and mortality match those used by the Central Statistics Office (CSO) in the 1997 population projections. Based on the ASSA model, the following are demographic impacts of HIV and AIDS in Botswana are predicted.

IMPACT OF AIDS ON ADULT MORTALITY

According to the 1997/98 demographic survey (see Fig. A2.1) the probability of death has risen for people aged 25-50. The probability of death for males peaks in the age range 35-40 years, rather than at 50 years and older as the 1991 census projections suggested. For women, it peaks at 30-35 years, two decades earlier than the census results would have projected. The most likely explanation for the disparity between the census and survey peaks is the effect of HIV and AIDS.

Survey results indicate that adult mortality doubled, or even trebled, in the age group 25-40 between 1991 and 1997/98. Strikingly, above the age of 40 there is no apparent rise in mortality rates. In fact, above age 40, survey estimates of mortality fall below census projections. This is a somewhat puzzling trend that currently lacks sufficient explanation. A comparison of ASSA model projections and the results of the 1997/98 demographic survey is shown below.

The model projections provide a reasonably close match for males under the age of 40, but appears to slightly overestimate female mortality under the age of 35. In both cases, the projection fails to predict the sudden reduction in mortality for males over 40 and females over 35. But overall, the demographic survey results are broadly compatible with the results of projections based upon the impact of HIV and AIDS, although there are puzzling results in the older age groups.

If the ASSA forecast is projected further into the future, it predicts that after 1998, mortality rates would rise rapidly and continue to do so. The projected adult mortality rates are shown in Fig. A2.3.

BOX A2.1

LAYING THE BODIES TO REST

Calvin Ngwape is Manager of Pule Funeral Services in Gaborone. It has branches in Molepolole, Kanye, Lobatse and Goodhope.

"We are certainly burying more young people these days – it used to only be old people in the past with the occasional young one. For example, out of 10 people now, two will be old, a couple will be aged between 40 and 50 years, and the rest will be in the 18 to 30 age group."

The funeral parlour used to bury 10-20 people a month. Now it's 60-70. "All the other funeral parlours in town are fully booked every weekend, it is not just us," Ngwape says.

Funerals traditionally take place early on a Saturday morning, but they are now regularly being held also on Sundays – and even during the week. "They can't fit it all in at the weekends any more and I think it is going to be changed to allow for mid-week funerals," says Ngwape.

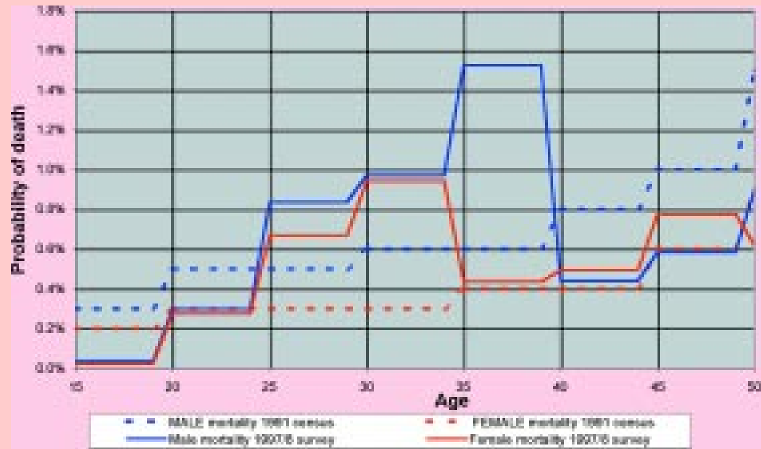
SOURCE: PULE FUNERAL SERVICES

Adult mortality is projected to treble for males and quadruple for females, compared to the 1997/98 values. The rates are expected to peak in 2005-2008. Note that the rates shown have doubled between 1997 and 2000. This is consistent with the difference between the demographic survey results and the more recent anecdotal evidence. Although not precisely accurate, this projection indicates an inevitable sharp rise in adult mortality as a result of HIV and AIDS.

Once combined to predict overall mortality in the future, the projections yield the pattern shown in Fig. A2.4. The lower graph shows a decreasing number of deaths from causes other than AIDS. However, once AIDS deaths (the upper

FIGURE A2.1:

IMPACT OF AIDS ON MORTALITY, 1998

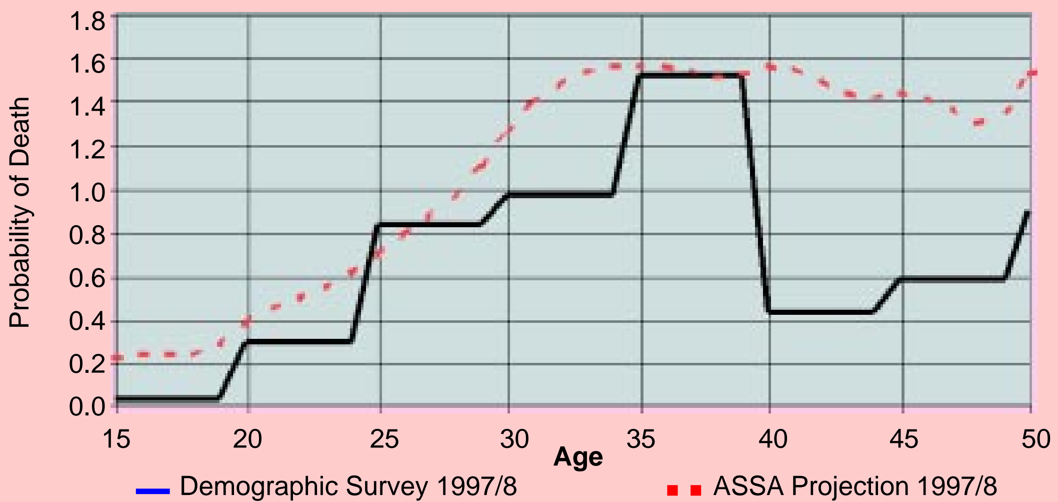


SOURCE: 1998 DEMOGRAPHIC SURVEY

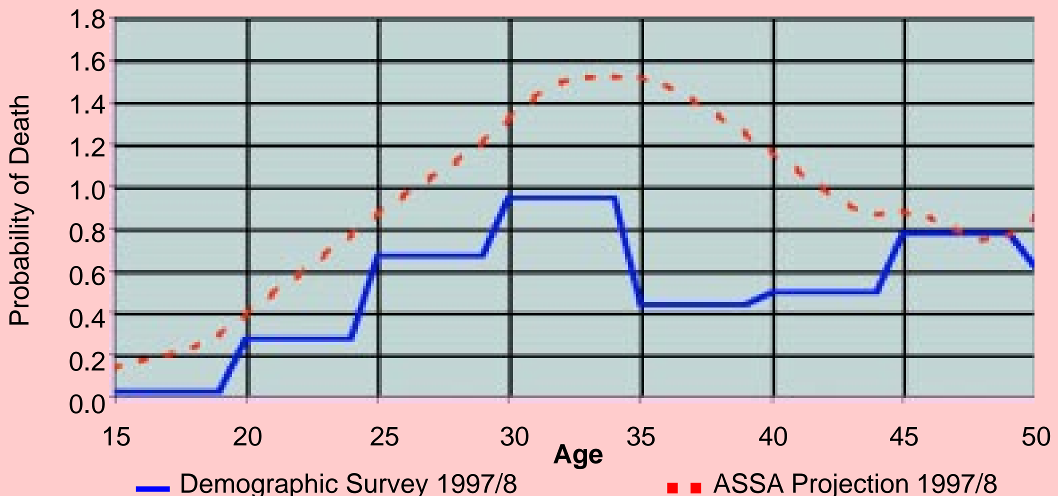
FIGURE A2.2

COMPARISON OF PROJECTED AND SURVEY MORTALITY RATES

Males (%)



Females (%)



graph) are added, total mortality is projected to peak around 2007-2008 at a level more than double that of 1985. Indeed, it suggests that AIDS could become the dominant cause of death within a few years, accounting for more than 75% of annual deaths in Botswana. The rate of mortality increase is very high and the effects will be dramatic in the coming decade. Mortality rates are rising by as much as 20% annually.

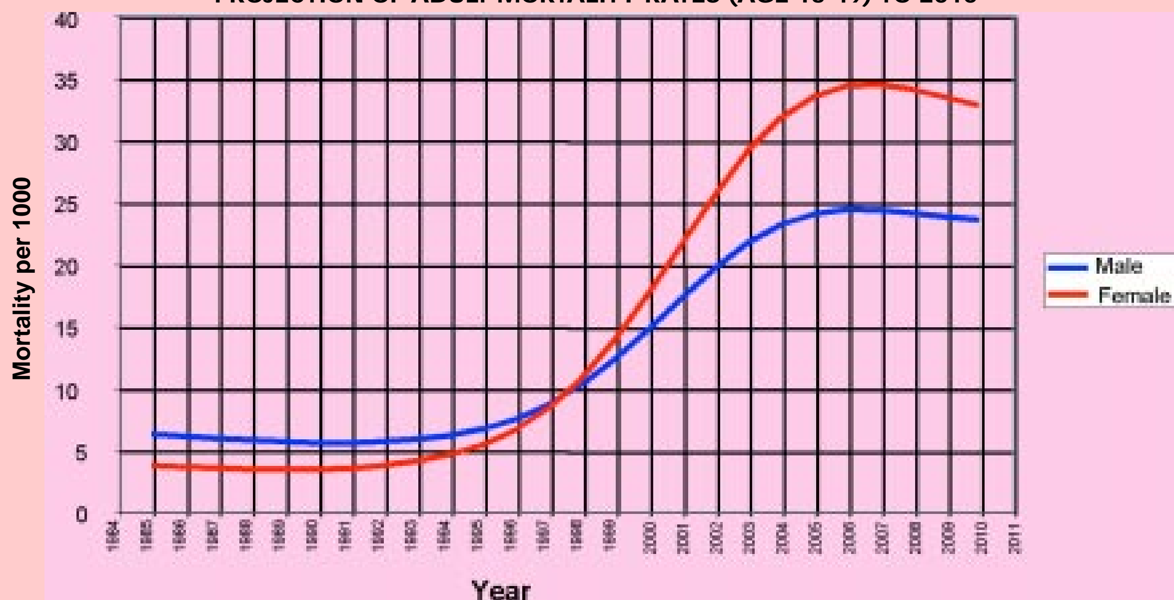
IMPACT OF AIDS ON LIFE EXPECTANCY

Life expectancy is one of the three indicators of development that are used to estimate the human development index. A long life enables people to pursue their goals, to develop their abilities and exploit their talents. It is often associated with adequate nutrition, good health and education.

In recent years UN projections of life expectancy in Botswana have gone down on account of the HIV and AIDS epidemic. According to Human Development Reports 1999 and 2000, life expectancy in Botswana was 47.4 and 46.2 in 1999 and 2000 respectively. Reliable life expectancy estimates for Botswana come from the population census, which is conducted every 10 years. In 1971 life expectancy was 55.5, rising to 56.5 and 65.3 respectively in 1981 and 1991. Another census will be conducted 2001.

FIGURE A2.3

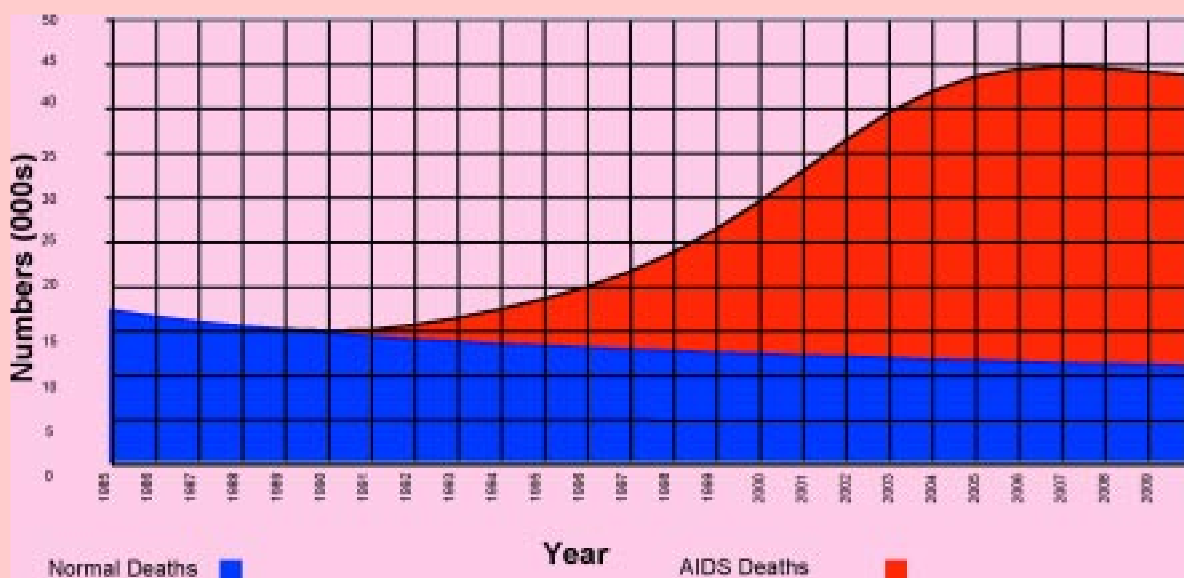
PROJECTION OF ADULT MORTALITY RATES (AGE 15-49) TO 2010



SOURCE: ABT ASSOCIATES 2000

FIGURE A2.4

PROJECTION OF TOTAL DEATHS TO THE YEAR 2010



SOURCE: ABT ASSOCIATES 2000

Projections of life expectancy are conducted between census years. Mortality is also estimated with considerably less accuracy in demographic surveys. Life expectancy in the most recent of these was 66.2 in 1997/98. While infant and child mortality rates were also estimated in the Family Health Survey of 1996.

There is general agreement that life expectancy in Botswana improved between 1981 and 1991. After that date, however, the estimates diverge – mainly because of different methods of accounting for the impact of HIV and AIDS. The preliminary estimate of 66.2 from the 1997/98 Demographic Survey is compatible with the projections from the CSO, and substantially higher than the UN projections.

IMPACT OF AIDS ON INFANT AND CHILD MORTALITY

Trends in child mortality, which is an important human development indicator, show that the steady expansion of health services throughout the country has in the past been associated with an impressive improvement in under-five mortality rates.

Between 1971 and 1991 the mortality rate fell from 151 deaths per 1000 live births to 56 (BHDR, 1997). The estimate for 1998 was 48 – which would have hoisted Botswana among the top three countries in sub-Saharan Africa (after the Seychelles and Mauritius).

However, the rates of HIV prevalence and MTCT in Botswana imply that close to one in every eight children being born is HIV positive. Recent comparisons of CSO data and UNDP reports suggest that the earlier, steady drop in under-5 mortality rates is reversing. The demographic survey of 1997/98 put the infant mortality rate (IMR – under age 1) at 51 per 1 000, and the child mortality rate (CMR – age 1-4 years) at 18 per 1, 000. The ASSA projection predicts these rates to be 60 (for the IMR) and 22 (for the CMR), as Fig. A2.5 shows.

The projections to the year 2010 appear to predict a continued stagnation in the rates of infant and child mortality, rather than a rapid increase. This is compatible with the stagnation in those rates witnessed in other African countries, and with the results of the demographic survey.

FIGURE A2.5

PROJECTED INFANT AND CHILD MORTALITY RATES (DEATHS PER THOUSAND)

SOURCE: ABT ASSOCIATES 2000

ANNEX 3

HIV AND AIDS AND TUBERCULOSIS

There is strong evidence that the rise of HIV infection in Botswana has fuelled a parallel Tuberculosis (TB) epidemic. TB notifications in the country declined at an average rate of 10.9% per year from 1980-1989, only to double in 1990-1996. Fig. A3.1 below shows the pattern of TB cases superimposed on the national HIV prevalence in antenatal clinics.

The association detected between HIV and TB elsewhere in the world also seems to exist in Botswana. In 1997, the national HIV prevalence among people with TB was 48%. In 1999 the prevalence of HIV was 80% among women with TB and 60% among men with TB (BOTUSA 1999). This is an exceptionally high incidence, especially in a country that devotes considerable resources to the health sector.

TB is now the single leading cause of death amongst people with AIDS, accounting for 36% of deaths. The age distribution of TB cases shows a marked increase in the number of young children and adults in the 25-39 years age group (Epidemiology Unit 1997). Recent demographic projections show that the prevalence rates of TB in the population will continue to rise fast and are expected to double in the next decade.

Botswana's TB programme is regarded as one of the strongest in the continent and was making significant inroads until the

BOX A3.1

HOME OR HOSPITAL CARE

Which is better: home- or hospital-based care?

Hospital care for chronically ill TB patients is expensive. In some hospitals, bed occupancy rates exceed 100% due to TB and HIV and AIDS admissions.

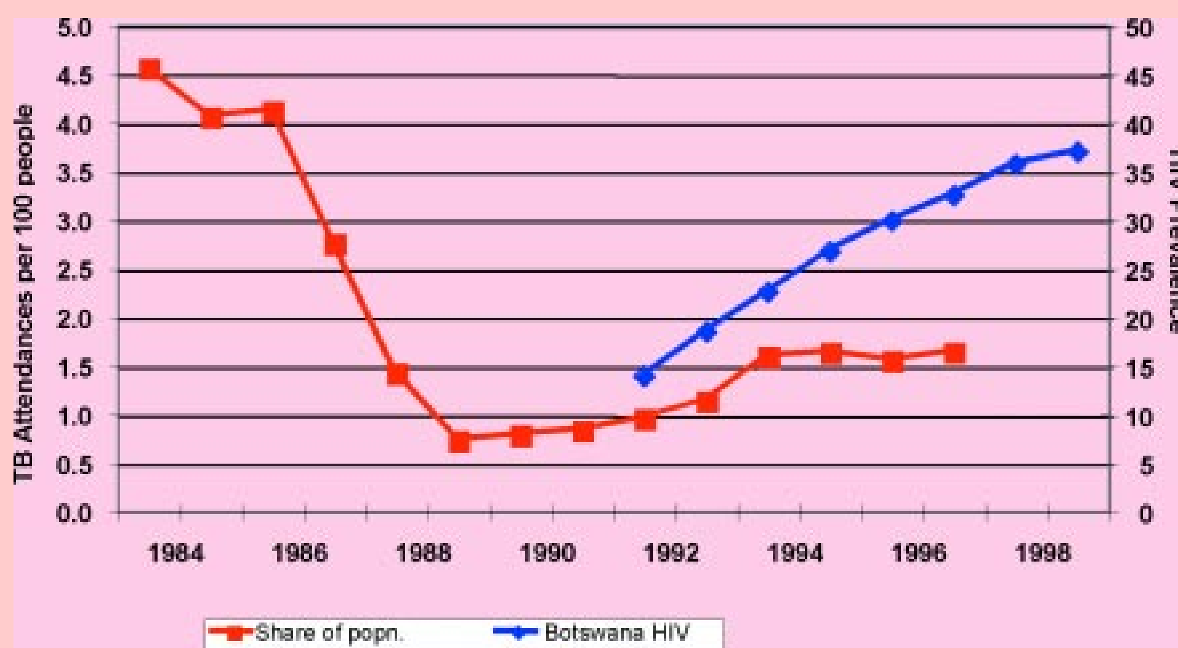
TB therapy can be given at home at a lower cost than in a hospital (BOTUSA 1999) , but home-based care has drawbacks. Since about 47% of the population live below the poverty datum line, many families do not have the means to care for their ill.

Treatment completion rates can be lower in home-based care, compared to supervised therapy in health facilities. Interrupted or incomplete treatment can cause acquired drug resistance and aggravate the spread of TB in the community.

SOURCE: BOTUSA 1999

FIG A3.1

OUTPATIENT TB CASES AND HIV PREVALENCE



SOURCE: AIDS/ STD UNIT AND HEALTH STATISTICS, 1984-1998

onset of the HIV and AIDS epidemic. Because of the positive correlation between TB and HIV, efficient TB treatment is one of the most effective ways to improve the quality and length of life for people with HIV and AIDS.

On the strength of clinical trials, UNAIDS in 1998 recommended that countries consider providing isoniazid TB preventive therapy (IPT) to persons living with HIV infection. The BOTUSA project (a collaborative TB/HIV research programme between Botswana and the USA) has helped develop IPT guidelines and training materials. It also monitors and evaluates IPT activities.

A 1999 BOTUSA survey of TB patients found that 90% were willing to be tested for HIV if treatment was available to extend and improve their quality of life. Also significant was the strong preference for same-day HIV tests. The survey clearly showed public support for more VCTservices, especially if these are combined with accessible and effective treatment.

BOTUSA has launched a pilot TB preventive therapy programme in Gaborone, Francistown and Ramotswa based on the use of isomazid, a drug that reduces the probability of HIV-positive people developing active TB by 50%-75%.

ANNEX 4

THE BOTSWANA HUMAN POVERTY INDEX

The Human Poverty Index (HPI) was first presented in the Human Development Report 1997. An HPI 2 has since been developed for industrialised countries. The HPI 1 -as it is now called - comprises, in one composite index, four basic dimensions of human life; a long and healthy life, knowledge, economic provisioning and social inclusion. The four dimensions of human life are the same for the HDI 1 and HPI 2, but the indicators differ. For instance the basic adult illiteracy rate is used in developing nations, while the functional illiteracy rate is used in HPI 2.

A long and healthy life is measured in the HPI 1 by the percentage of people born today who are not expected to survive the age of 40. Knowledge is measured by adult illiteracy rate, economic provisioning by the percentage of people lacking access to health services, safe water and the percentage of children under-5 who are moderately or severely underweight. In the absence of a suitable indicators and lack of data, social inclusion is not measured in the HPI 1, while long-term unemployment is the indicator in the HPI 2.

The Botswana HPI was constructed in a slightly different manner from the index presented in the HDRs since 1997. As can be seen below, long and healthy life is measured by the percentage of children that die before the age of 5, not as in the HPI 1; the percentage of people who will not survive 40.

Botswana's HPI reveals that more than a quarter of the population lives in human poverty. It indicates both the persistence of human deprivation in Botswana and some of the impressive strides taken toward reducing human poverty. The HPI also reveals stark disparities between rural and urban areas, as shown in Table A4.2. The HPI in rural areas is more than double of that in urban areas. These disparities are closely linked to the availability of services provided by the Government, i.e. schooling, water supply and, health services.

Also evident are significant variations of human poverty between districts across Botswana. Table A4.3 shows that the HPI values in rural districts such as Ghanzi and Kgalagadi were almost three times higher than in Francistown. This was consistent with the observation that human poverty levels are closely connected to the availability of publicly provided social services.

TABLE A4.1

HUMAN POVERTY INDEX BY YEAR

Year	% of children that die before age 5	% adult illiteracy rate	% population without safe water	% population without access to health services	% of under fives who are moderately or severely underweight	Composite P Value	Human Poverty Index (HPI)
1991	5.6	46.2	7.0	15.0	14.3	12.1	46.5
1992	5.6	31.1	7.0	15.0	15.0	12.3	31.8
1993	5.6	31.1	7.0	15.0	14.5	12.2	31.8
1994	5.6	31.1	7.0	15.0	12.5	11.5	31.7
1995	5.6	31.1	7.0	15.0	12.8	11.6	31.7
1996	5.6	31.1	7.0	15.0	12.8	11.6	31.7
1997	4.5	25.6	7.0	12.0	18.5	12.5	26.6
1998	4.5	25.6	7.0	12.0	18.0	12.3	26.6

Note: Several of the components of the HPI are not updated annually. Interpolated values have been shown here in the interest of completeness. The trend in the resulting values must therefore be interpreted with caution. Moreover some of the indicators are not updated regularly, notably the under-five mortality rate and the illiteracy rate. Figures showing access to safe water and health services are unadjusted from the 1991 population and housing census. More importantly, the projections of child mortality in these tables have not been adjusted for the impact of HIV and AIDS. It must be stressed, therefore, that these tables are suggestive at best.

TABLE A4.2

HUMAN POVERTY INDEX BY SETTLEMENT TYPE (1996)

Settlement Type	% of children that die before age 5	% adult illiteracy rate	% population without safe water	% population without access to health services	% of under fives who are moderately or severely underweight	Composite P Value	Human Poverty Index (HPI)
Urban	4.7	16.7	0.0	0.0	7.5	2.5	16.8
UrbanVillage	4.7	16.7	0.0	0.0	12.8	4.3	16.9
Rural	7.6	37.8	23.0	I5.0	13.3	17.1	39.0

TABLE A4.3:

HUMAN POVERTY INDEX BY DISTRICT (1996)

District	% of children that die before age 5	% adult illiteracy rate	% population without safe water	% population without access to health services	% of under fives who are moderately or severely underweight	Composite P Value	Human Poverty Index (HPI)
Gaborone	3.8	21.9	0.0	0.0	7.5	2.5	21.9
Francistown	4.3	14.4	0.0	0.0	6.3	2.1	14.5
Lobatse	5.2	18.7	0.0	0.0	2.1	0.7	18.8
Selebi-Phikwe	4.0	16.5	0.0	0.0	6.8	2.3	16.6
Jwaneng	5.7	14.4	0.0	0.0	..	..	..
Orapa	4.7	14.4	0.0	0.0	..	..	..
Central	6.5	34.2	..	13.0	..	..	..
Kweneng	6.1	37.6	..	15.0	12.4	9.1	..
South East	4.5	27.4		0.0	14.0	4.7	
North East	4.3	32.7	11.0	0.0	8.9	6.6	32.8
North West	5.9	39.5	19.0	20.0	13.3	17.4	40.6
Southern	6.6	37.7	12.0	15.0	5.1	10.7	38.1
Ghanzi	9.1	43.3	7.0	40.0	15.2	20.7	45.0
Chobe	8.3	39.5	..	15.0	13.7	9.6	..
Kgalagadi South	7.6	43.4	10.0	36.0	12.7	19.6	44.8
Kgalagadi North	13.5	43.4	10.0	36.0	..	..	..

ANNEX 5:

BOTSWANA HUMAN DEVELOPMENT DATABASE

PART 1 - TIME SERIES DATA

INDICATOR	SOURCE	UNIT
1. Overall status of human development		
Life expectancy at birth	CSO	Years
68		
Adult literacy	Census; MOE; Lit. Surv,UNDP	% of adults
Net enrolment rate, 1st level	MOE; Census; CSO	% of age group
Net enrolment rate, 2nd level:Junior	MOE; Census; CSO	% of age group
Net enrolment rate, 2nd level:Senior	MOE; Census; CSO	% of age group
Combined 1st and 2nd levels	MOE; Census; CSO	% of age group
Real GDP per capita	BoB	Pula in 1985/86 prices
Real GDP per capita in PPP$	UNDP	PPP$
Botswana's international HDI ranking	UNDP HDRs	Rank (descending order)
Botswana Human Development Index (BHDI)	Annex D	Index
2. Poverty		
Adult illiteracy rate	Literacy survey report	% of people
Population without access to health services	NDP 8	% of people
Population without access to safe water	MMRWA/MFDP	% of people
Under five malnutrition rate	NNSS	% of under fives
Rate of income poverty	Poverty study	% of people below poverty line
Rate of unattended births c/	MOH	% of births
Female illiteracy	Literacy survey report	% of adult females
Number of registered destitutes	MLG	Number d/
Botswana Human Poverty Index (BHPI)	Annex D	Index
3. Survival and health		
Under five mortality rate	NDP8, 1991 census; CSO	Deaths per 1,000 live births
Infant mortality rate	NDP8, 1991 census; CSO	Deaths per 1,000 live births
Maternal mortality rate	CSO 1991 census data	Deaths per 100,000 live births
Underweight births	Health statistics	% of births below 2.5kg
Adult HIV prevalence	NACP	% of sexually active population
New reported cases of AIDS	AIDS/STD unit MoH	Number
HIV infection general population	AIDS/STD unit MoH	% of population
HIV infection sexually active (15-49)	AIDS/STD unit MoH	% of population
Registered Home based care patients	AIDS/STD unit MoH	Number
STD attendance	AIDS/STD unit MoH	Number
Births attended by trained health personnel g/	Health statistics	% of births
Diarrhoea episodes	BFH statistics	Per 10,000 children
Oral rehydration therapy use rate	Health statistics, BFHS	% of diarrhoea cases

	Years [a]									
1971	1981	1991	1992	1993	1994	1995	1996	1997	1998	1999
55.5	56.5	65.3	65.6	65.9	66.1	66.4	66.7	67.0	67.2	67.5
. .	34.0	54.0	. .	68.9	68.9	. .	. .	74.4		
42.0	86.0	93.7	90.8	95.1	95.9	96.7	97.9	98.4		
7.3	11.9	35.3	34.4	35.7	39.8	45.3	. .	. .	. .	. .
0.5	4.2	13.8	14.1	15.2	16.0	19.9	. .			
37.2	57.6	67.7	67.4	67.8	68.6	70.5				
167	1,702	3,343	3,259	3,310	3,331	3,475	3,584	3,787	3,845	
. .	. .	4,690	5,120	5,220	5,367	5,611	. .	7,690		
. .	. .	95	74	71	97	74	71	97	97	122
. .	. .	0.63	0.65	0.67	0.68	0.69	0.47	0.72	-	-
. .	66.0	46.0	. .	31.1	31.1	. .	. .	25.6	. .	. .
		14.6				12.0	. .	. .	. .	. .
		10.0		23.0		. .	. .	. .	23.0	. .
. .	25.0	14.3	15.0	14.5	12.5	12.8	12.8	18.5	18.0	12.9
. .	59.0	. .	. .	47.0	. .	. .	. .	. .	. .	. .
. .	34.3	10.9	8.0	5.1	5.0	5.0	5.0	6.3	. .	. .
. .	64.0	43.8	33.9	29.7	29.7	29.7	29.7			
. .	5,000	. .	. .	13,597	14,870	15,597	15,292	15,880	17,678	17,554
		39.0	31.8	31.8	29.9	28.2	26.5	26.6	26.6	. .
151	109	38	45	45	45	45	45	49		
100	71	31	37	37	37	37	37	41	39	38
. .	. .	326	. .	. .	. .	. .	. .	. .	. .	. .
. .	8.9	9.9	10.0	11.0	10.1	10.6	11.0	14.0	. .	
. .	. .	. .	19.3	18.2	23.8	32.3	31.7	31.0	29.0	29.0
		270	534	876	575	1172	1368	2224	2992	
								16.9	17.6	17.0
								24.0	29.0	28.0
								. .	. .	7000
					201701	208225	208254	202350	. .	. .
. .	65.7	89.1	92.0	94.9	95.0	95.0	95.0	93.7		
. .	. .	1792	2125	1970	1950	2701	2804	2886	2950	2756
. .	. .	. .	. .	. .	. .	. .	. .	43.0	. .	. .

INDICATOR	SOURCE	UNIT
3. Survival and health (continued)		
Access to health services	NDP 8	% of population within 15km
Access to safe water	1991 Census data,	% with access
Access to safe sanitation	1991 Census data,	% with access
Population per doctor	CSO/ Health Statistics	Number of persons
Population per nurse	NDP 8, Health Statistics	Number of persons
People with disabilities	1991 census	% of population
Full immunisation	MOH EPI data	% of under-twos
TB immunisation	MOH EPI data	% of under-ones
Measles immunisation	MOH EPI data	% of under-ones
4. Educational attainment		
Primary net enrolment rate	MOE, Census, CSO	% of age group enrolled
Male	MOE, Census, CSO	% of age group enrolled
Female	MOE, Census, CSO	% of age group enrolled
Junior secondary net enrolment rate s/	MOE, Census, CSO	% of age group enrolled
Male	MOE, Census, CSO	% of age group enrolled
Female	MOE, Census, CSO	% of age group enrolled
Senior secondary	MOE, Census, CSO	% of age group enrolled
Male	MOE, Census, CSO	% of age group enrolled
Female	MOE, Census, CSO	% of age group enrolled
Progression rate: standard 1 to form 1	MOE	% of standard 1 entrants
Male	MOE	% of standard 1 entrants
Female	MOE	% of standard 1 entrants
Progression rate: standard 1 to form 4	MOE	% of standard 1 entrants
Male	MOE	% of standard 1 entrants
Female	MOE	% of standard 1 entrants
PSLE pass rate	MOE	% of persons taking exam
Male	MOE	% of persons taking exam
Female	MOE	% of persons taking exam
JC pass rate q/	MOE	% of persons taking exam
Male	MOE	% of persons taking exam
Female	MOE	% of persons taking exam
Cambridge pass rate	MOE	% of persons taking exam
Male	MOE	% of persons taking exam
Female	MOE	% of persons taking exam
5. Incomes and employment		
Size of labour force	BoB	Number of persons
Employment share of formal sector	Emp. Stats. L Force Surv.	% of labour force
Formal sector employment	CSO/MFDP	Number of persons
Employment share of trad. agriculture	Emp. Stats. L Force Surv.	% of labour force
Employment share of public sector	Emp. Stats. L Force Surv.	% of labour force
Employment share of private sector	Emp. Stats. L Force Surv.	% of labour force
Labour force unionisation	BFTU	% unionised
Unemployment rate	Emp. Stats. L Force Surv.	% of labour force
Total no. employees of public work progs.	MFDP/ MLG	Total full or part time
Income distribution	HIES	Share of lowest 40%

	Years[a]									
1971	1981	1991	1992	1993	1994	1995	1996	1997	1998	1999
..	..	85.4	..	..	..	88.0	..	..	..	..
..	..	90.0	..	77	..	..	..	..	77.0	..
..	..	55	..	..	..	..	..	..	55.0	..
..	7,022	4,608	3,959	3,832	3,580	3,712	3,807	3,616	3,999	..
..	794	495	444	423	425	397	407	371	369	..
..	..	2.2	..	..	..	..	..	..	..	..
..	36	67	..	..	57	..	..	..	..	..
..	92.0	92.0	..	..	92.3	64.0	67.0	59.0	66.0	..
..	63.0	87.0	..	..	71.3	72.0	82.0	79.0	80.0	..
42.0	86.0	93.7	90.8	95.1	95.9	96.7	97.9	98.4		
38.0	80.0	92.7	93.0	93.8	94.7	95.7	..	97.5		
46.0	92.0	96.5	96.3	96.4	97.1	97.7	..	99.2		
7.3	11.9	35.3	34.4	35.7	39.8	45.3	..	..		
6.3	10.1	29.1	28.5	31.2	34.3	39.2	..	..		
8.1	13.3	41.1	40.1	40.1	45.2	51.1	..	..		
0.5	4.2	13.8	14.1	15.2	16.0	19.9	..	..		
0.6	4.8	15.1	14.7	15.3	16.2	19.6	..	..		
0.5	3.7	12.7	13.6	15.2	15.9	20.2	..	..		
..	..	73.1	76.8	80.4	75.3	77.8	78	82.1		
..	..	65.6	68.5	72.8	70.2	71.5	73.3	77.7		
..	..	80.5	85.0	88.1	80.2	84.0	82.7	87.1		
..	..	22.5	23.7	22.9	22.0	29.9	30.1	31.6		
..	..	22.6	24.1	22.9	22.1	28.5	28.6	30.3		
..	..	22.4	23.4	22.9	21.9	31.2	31.6	32.8		
84.0	67.6	71.6	71.0	71.7	72.2	70.9	71.0	78.1		
86.0	..	..	..	..	..	..	..	..		
83.0	..	..	..	..	..	..	..	..		
67.0	68.0	80.1	79.3	77.9	76.9	76.5	76.4	..		
72.0	..	..	..	..	..	..	..	..		
62.0	..	..	..	..	..	..	..	..		
68.0	53.0	69.9	64.1	64.6	72.0	75.5	71.5	78.0		
68.0	53.8	..	..	..	..	..	..	..		
69.0	52.1	..	..	..	..	..	..	..		
163,791	315,475	441,203	458,488	476,915	496,576	517,571	544 561	..	..	..
31.4	30.9	53.3	51.3	49.4	47.4	45.5	46.1	..	..	..
51,408	97,400	222,800	227,500	226,300	231,324	231,400	235,400	226,859	241,662	255,607
22.5	47.2	33.8	32.5	31.2	30.0	28.8	..	..	..	..
..	10.3	15.5	15.7	16.9	16.5	16.5	11.6	..	..	..
..	20.5	32.3	31.1	29.9	28.7	27.5	31.6	..	..	..
..	..	4.1	..	..	..	..	..	..	..	..
..	10.2	13.9	..	20.9	21.2	22.2	21.5	..	19.6	..
..	..	..	142,624	80,214	75,200	61,693	..			
..	10.7	..	..	11.7	..	..	..	..	..	..

INDICATOR	SOURCE	UNIT
6. Agriculture		
Cereal production	MOA	MT'000s
Planted area for crops	MOA	Hectares'000s
Rainfall	CSO/ MOA	mm
Whether declared drought year	MFDP	Yes/no
Cattle ownership	CSO	% farming HH without cattle
7. Gender		
Female share of population	Pop. projections, Census	% of population
Male share of population	Pop. projections, Census	% of population
Female life expectancy	CSO, pop. projections	Years
Male life expectancy	CSO	Years
Female adult literacy	Literacy Survey	% of male adults
Male adult literacy	Literacy Survey	% of female adults
Female net enrolment rate, 1st level	MOE, CSO population projs.	% of age group
2nd level: Junior	MOE, CSO population projs.	% of age group
2nd level: Senior	MOE, CSO population projs.	% of age group
Combined 1st and 2nd levels	MOE, CSO population projs.	% of age group
Male net enrolment rate 1st level	MOE, CSO population projs.	% of age group
2nd level: Junior	MOE, CSO population projs.	% of age group
2nd level: Senior	MOE, CSO population projs.	% of age group
Combined 1st and 2nd levels	MOE, CSO population projs.	% of age group
Female share of earned income	. .	% of earned income
Male share of earned income	. .	% of earned income
Women in parliament	Parliament	% of MPs
Women councillors in local authorities	MLGLH	% of councillors
Women in managerial positions	Census reports	% of positions
Women in professional/technical positions	Census reports	% of positions
Women's share of earned income	. .	% of earned income
Women in clerical and sales positions	Census reports	% of positions
Women's share of formal employment	Labour statistics, Census	% of positions
Women in service positions	Census reports	% of positions
Female headship of households	1991 Census; HIES	% of households
Reported violence against women cases	Police	Number
Gender equality index (GEI)	Annex D	Index
8. Demography and urbanisation		
Population (de facto)	CSO, pop. projections	Thousands
Annual population growth rate	CSO	% increase per annum
Population share of urban areas	CSO	% of people
Population share of rural areas	CSO	% of people
Annual growth in urban population	CSO	%
Annual growth in rural population	CSO	%
Total fertility rate	CSO,1981census, NDP8	Chlidren per female
Condom distribution	BFH- FP Unit	million
Dependency ratio	CSO	Per economically active pop.

	Years [a]									
1971	1981	1991	1992	1993	1994	1995	1996	1997	1998	1999
84.0	55.0	54.9	15.9	16.7	. .	152.0	. .	. .	. .	. .
258	290	189	84	264	. .	508	160	44	. .	. .
434.2	338.8	214.0	675.8	414.2	. .	. .	. .	. .	. .	. .
. .	Yes	Yes	Yes	Yes	Yes	Yes	No	yes	Yes	Yes
. .	32	38	. .	47	. .	49	. .	. .	. .	. .
54.3	51.7	52.2	52.2	52.0	52.0	51.9	51.9	51.8	51.7	51.6
45.7	48.3	47.8	47.8	48.0	48.0	48.1	48.1	48.2	48.3	48.4
58.6	59.7	67.1	67.4	67.6	67.9	68.1	68.4	68.6	68.8	69.0
52.5	52.3	63.3	63.6	63.9	64.2	64.5	64.8	65.1	65.4	65.7
. .	36.0	56.2	. .	70.3	. .	. .	. .	76.9	. .	. .
. .	32.2	53.2	. .	66.9	. .	. .	. .	. .	. .	. .
46.0	92.0	96.5	96.3	96.4	97.1	97.7	. .	87.0	. .	. .
8.1	13.3	41.1	40.1	40.1	45.2	51.1	. .	. .	. .	. .
0.5	3.7	12.7	13.6	15.2	15.9	20.2	. .	. .	. .	. .
39.3	60.5	69.2	68.8	68.9	69.9	71.9	. .	82.6		
38.0	80.0	92.7	93.0	93.8	94.7	95.7	. .			
6.3	10.1	29.1	28.5	31.2	34.3	39.2	. .			
0.6	4.8	15.1	14.7	15.3	16.2	19.6	. .			
35.0	54.5	66.2	65.9	66.6	67.3	69.1				
. .	. .	. .	. .	. .	. .	. .	. .	..	..	..
. .	. .	. .	. .	. .	. .	. .	. .	..	..	..
0.0	2.9	2.6	2.6	2.6	9.1	9.1	9.1	9.1	9.1	18.2
. .	. .	. .	. .	. .	14.2	14.2	14.2	14.2	14.2	23.1
11.9	24.8	25.7	. .	. .	. .	. .	. .	..	..	..
47.9	57.4	50.6	. .	. .	. .	. .	. .	..	..	..
. .	. .	. .	. .	. .	. .	. .	. .	..	..	..
47.4	52.2	65.6	. .	. .	. .	. .	. .	..		
24.0	38.9	34.1	36.0	36.4	38.1	39.0	. .			
51.7	60.6	38.6	. .	. .	. .	. .	. .	. .	. .	
. .	. .	47.0	. .	45.8	. .	. .	. .	. .	. .	
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	
. .	. .	. .	. .	. .	0.80	0.80	0.81	0.81	0.81	0.88
596.9	941.0	1,326.8	1,357.9	1,390.9	1,425.4	1,461.1	1,496.0	1,533.4	1,571.7	1,611.0
3.1	3.4	2.7	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.3
9.5	17.7	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7
90.5	82.3	54.3	53.8	53.3	52.8	52.3	51.8	51.3	50.8	50.3
. .	8.0	4.6	4.6	4.6	4.6	4.6	4.4	4.4	4.4	4.4
. .	2.7	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9
5.6	7.1	5.2	5.1	5.0	4.8	4.7	4.2	4.4	. .	. .
. .	. .	. .	5.4	5.1		8.7				
1.1	1.1	0.8	. .	. .	. .	. .	0.8	0.8	0.8	0.7

INDICATOR	SOURCE	UNIT
9. Participation and dependency		
Children immunised for measles	MOH	% of under-twos immunised
Avoidance of HIV	NACP	% sexually active population
Youth in education and training	CSO, MOE	% of 14-18 year olds (gross)
% of pre-schoolers at pre-school	MOE	% of age group
% of adults with formal sector job	MFDP	% of labour force
Number of registered societies	Registrar of Societies	Number of registered societies
Private newspapers	Local newspapers	Weekly sales per 100 pop.
New business formation	CSO	New businesses
Teenage girls becoming pregnant	1991 census statistics	% of teenage girls
People Participation Index (PPI)	Annex D	Index
10. Social change and social stress		
Serious crimes	Police annual reports	Reported adult cases m/
Rape cases	Police annual reports	Reported adult rape cases
Divorces	. .	Per 1,000 couples
Registered vehicles	RTA/CSO	Thousands
Road accidents	Transp. & comms stats	Number
Deaths caused by road accidents	Police annual reports	Number
Injuries caused by road accidents	Police annual reports	Number
11. Technology and information		
Use of electricity for household lighting	Census, 1993/94 HIES	% of households
Access to a radio	CSO	% of households
Access to TV	CSO	% of households
Connected telephone subscribers	BTC	Connected telephones
Telephone density	BTC	Telephones per 100 persons
Internet users	Ibis Botswana	Number of subscribers
12. Democracy		
Voter registration	Election reports	number
% voter turnout at national elections	Election reports	% of reg. voters that voted
% turnout of voting age pop. in nat. elections	Election reports	% of VAP that voted
% of opposition seats in national assembly	Election reports	% of seats
Total size of armed forces	BDF	Thousands
13. Economy		
GDP, constant prices (1985/86)	BoB annual report/MFDP	P million
Annual GDP growth rate	BoB annual report/MFDP	% of GDP
Mining share of GDP	BoB annual report/MFDP	% of GDP
Non-mining share of GDP	BoB annual report/MFDP	% of GDP
Agriculture share of GDP	BoB annual report/MFDP	% of GDP
Manufacturing share of GDP	BoB annual report/MFDP	% of GDP
Government share of GDP	BoB annual report/MFDP	% of GDP
Government share of consumption	BoB annual report/MFDP	% of GDP
Private share of consumption	BoB annual report/MFDP	% of GDP

	Years [a]									
1971	1981	1991	1992	1993	1994	1995	1996	1997	1998	1999
..	63.0	87.0	..	..	71.3	72.0	82.0	79.0	80.0	..
..	..	..	86.1	81.5	77.4	73.3	70.1	67.5	64.3	63.0
8.4	14.1	47.2	46.8	51.1	50.2	58.2	51.0	53.8	..	..
..	..	..	..	..	..	..	8.7	..	..	..
31.4	30.9	53.3	51.3	49.4	47.4	45.5	43.2			
..	..	0.792	0.844	1.024	..	1.325	1.599	1.809	2.047	2.385
..	..	..	..	..	3.7	3.9	4.1			
..	..	2549.0	2162.0	1888.0	1795.0	..	..	..	..	..
..	..	19.0	..	..	..	..	..	..	..	..
..	..	..	..	..	..	0.42	0.44	0.44	0.45	
..	706	1609	1638	1962	2118	2528	2563	2579	2679	2871
..	365	749	712	853	968	1056	1101	1183	1310	1502
..	..	..	..	..	..	..	..	..	..	..
	34.7	83.0	90.0	94.4	108.0	118.0	128.0	99.2	114.0	133.6
..	1,715	8,381	9,017	9,169	9,420	9,536	10,338	11,881	14,279	16,920
..	93	349	368	379	352	410	338	411	453	494
..	940	4,871	4,909	5,136	5,171	5,247	5,457	5,956	6,887	8,061
..	5.4	16.0	..	11.5	..	..	..	..	..	..
41.0	..	..	..	65.7	..	..	..	..	..	..
..	..	..	..	3.6	..	..	..	..	..	..
..	7,812	26,367	32,607	36,477	43,487	50,447	67,850	72,189	85,592	102,016
..	..	2.2	2.5	2.9	3.4	3.8	4.0	4.7	5.5	6.4
..	..	..	..	..	..	..	644	..	..	..
140.4	293.6	367.1	..	..	361.9	..	..	..	..	459.6
54.7	77.6	68.2	..	..	76.7	..	..	..	..	77.1
37.5	54.2	47.9	..	..	44.6	..	..	..	..	37.7
..	..	7.0	..	..	30.0	30.0	30.0	30.0	30.0	16.0
..	..	8	..	..	..	..	..	8.0	..	..
..	1,623.8	4,521.9	4,516.0	4,700.5	4,847.5	5,184.8	5544.3	5928.9	6170.3	..
..	7.5	6.3	-0.1	4.1	3.1	7.0	7.2	8.3	1.9	..
..	38.7	34.9	33.3	33.6	32.1	33.0	32.6	33.5	30.8	..
..	61.3	65.1	66.7	66.4	67.9	67.0	67.4	66.5	69.2	..
..	9.9	4.5	4.4	4.2	3.9	3.6	3.4	3.1	2.9	..
..	7.7	6.4	6.3	6.0	6.0	6.0	6.0	5.8	5.9	..
..	13.3	16.1	16.7	16.8	17.2	17.2	17.3	16.0	16.2	..
..	27.0	24.1	28.4	28.7	28.9	28.9	28.1	28.7	30.8	..
..	57.0	38.2	38.7	32.7	33.0	28.4	25.0	28.3	38.4	..

INDICATOR	SOURCE	UNIT
13. Economy (continued)		
Tax revenue share of GDP	BoB annual report/MFDP	% of GDP
Mineral tax revenue share of GDP	BoB annual report/MFDP	% of GDP
Rate of inflation	BoB annual report/MFDP	%
Exchange rate	BoB annual report/MFDP	$ per Pula, year end
Exports	BoB annual report/MFDP	% of GDP
Imports	BoB annual report/MFDP	% of GDP
Current account balance	MFDP/BoB	P million
Total external debt	BOB	P million
Debt service ratio	BoB	Debt service as % of exports
Net foreign direct investment	MFDP/BoB/UNCTAD	$ billion
Gross domestic investment	MFDP/BoB	% of GDP
Gross domestic savings	MFDP/BoB	% of GDP
14. Public expenditure		
Public expenditure as % of GDP	MFDP	% of GDP
Annual growth in real public expenditure r/	MFDP	%
Overall budget surplus/ (deficit)	MFDP	% of expenditure
Health share of expenditure	MFDP	% of public expenditure
Education share of expenditure	MFDP	% of public expenditure
Defence share of expenditure	MFDP	% of public expenditure
Ratio of defence to health/educ. expend.	MFDP	%

a/ Census years plus five most recent.
b/ Data refers to 1990.
c/ Assumed a leveling off of percent unattended births at 5% since 1993, data subject to change given new data from BFHS.
d/ Data is for registered destitutes and refers to district totals for all years except 1995/96, which uses the national total.
e/ Data refers to 1980.
f/ Data refers to 1983.
g/ Used the reciprocal of % unattended births.
h/ Data refers to 1988.
i/ 1985/86.
j/ Data refers to 1980.
k/ Data refers to 1989.
l/ Guestimate - no figure ever made public.
m/ Data refers to 1990.
n/ Murder, rape, defilement and robbery.
o/ Data refers to 1969.
p/ Data refers to 1984.
q/ Data for 1997 absent due to changeover from 2 to 3 yr JC.
r/ For the years 1995 - 1997 GDP deflator base year is 1995.
s/ 1997 change over from the 7-2-3 to 7-3-2 education system

	Years a									
1971	1981	1991	1992	1993	1994	1995	1996	1997	1998	1999
. .	14.0	36.9	36.9	33.1	29.0	27.5	29.7	33.1	24.2	. .
. .	4.8	22.7	20.4	20.5	18.7	17.7	20.8	22.9	17.0	. .
4.0	16.3	11.8	16.1	14.4	10.6	10.5	10.1	8.9	6.5	7.2
1.3	1.1	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2
. .	53.1	51.9	44.7	48.7	47.7	51.2	57.8	56.2	42.4	. .
. .	69.5	43.6	39.7	34.7	33.9	32.6	37.7	41.4	43.6	. .
. .	-171.2	731.6	333.1	1,195.4	547.6	936.6	1,643.5	2,633.8	860.0	1,842.0
31.8	132.8	787.8	965.8	1,096.2	1,267.8	1,377.7	1,439.9	1,791.2	1,996.9	2,422.7
. .	. .	3.9	2.9	3.9	4.2	3.4	3.1	2.4	2.9	. .
. .	. .	37.0	47.0	67.0	78.0	70.0	71.0	100.0	168.0	. .
. .	. .	26.3	28.0	25.4	24.0	24.0	23.6	24.5	28.0	. .
. .	. .	18.8	19.3	18.0	18.0	17.2	16.7	18.6	26.6	. .
. .	37.9	43.2	41.3	40.3	34.1	35.5	35.9	35.5	39.6	. .
. .	-5.0	3.0	-5.3	4.3	-13.1	6.8	11.5	5.5	. .	. .
. .	5.5	20.7	23.4	19.6	4.6	5.2	21.4	11.8	15.0	4.5
. .	5.2	5.1	5.6	6.0	6.1	6.4	6.0	5.4	5.1	..
. .	18.6	21.9	22.8	22.6	22.9	23.9	25.2	23.4	24.7	..
0.0	7.7	7.4	7.4	9.6	9.4	7.9	7.8	8.2	8.8	..
. .	32.4	51.4	47.0	46.7	39.0	32.5	25.8	28.5	29.6	27.1

PART 2 - DATA BY SETTLEMENT TYPE AND DISTRICT

INDICATOR a/	UNIT	NATIONAL	URBAN	RURAL	GABORONE	FRANCISTOWN	LOBATSE
1. Overall status of human development							
Life expectancy at birth (1991)	Years	65.3	69.9	63.2	69.3	68.3	66.7
Adult literacy (1993)	% of adults	68.9	83.3	64.1	78.1	85.6	81.3
Net enrolment rate, 1st level (1995)	% of age group	96.7	90.6	80.9	91.3	89.5	92.0
Net enrolment rate, 2nd level: Junior	% of age group	..	..	..	..	..	..
Net enrolment rate, 2nd level: Senior	% of age group	..	..	..	..	..	..
Combined 1st+2nd levels enrolment (1995)	% of age group	70.5	..	..	77.6	81.5	82.0
Real GDP per capita (1995)	Pula in 1985/86 prices	3,475	..	..	..	..	..
Real GDP per capita in PPP$ (1994)	PPP$	5,367	11,572	3,052	..	..	..
Adj. real GDP per capita, PPP$ (1994)	PPP$	5,367	5,525	3,052	..	..	..
Bots. Human Dev. Index (BHDI) (1994)	Index	0.75	0.81	0.60	..	..	..
2. Poverty							
Adult illiteracy rate (1993)	% of people	32.0	16.7	37.8	21.9	14.4	18.7
Population without health servs. (1995)	% of people	12.0	2.0	17.0	0.0	0.0	0.0
Population without safe water (1991) b/	% of people	23.0	0.0	47.0	0.0	0.0	0.0
Under five malnutrition rate (1999) c/	% of under fives	12.9	6.6	20.3	4.9	7.6	5.2
Rate of income poverty (1993/94)	% of people below PDL	47.0	29.0	55.0	18.0	..	..
Rate of unattended births d/	% of births	5.0	..	..	..	0.5	..
Female illiteracy (1993)	% of adult females	29.7	15.0	35.0	18.4	14.0	13.1
Number of registered destitutes (1999)	Number	17,554	343.0	17 211	67.0	116.0	126.0
Botswana Human Poverty Index (BHPI) e/	Index	22.0	11.7	27.1	15.2	10.1	13.1
3. Survival and health							
Under five mortality rate (1991)	Deaths per 1,000 births	62.0	46.0	80.0	38.0	43.0	52.0
Infant mortality rate (1991)	Deaths per 1,000 births	48.0	37.0	60.0	31.0	35.0	41.0
Maternal mortality rate (1991)	Deaths per 100,000 births	326	254	348	183	303	161
Underweight births (1995)	% of births below 2.5kg	10.6	..	..	15.0	11.1	10.5
Adult HIV prevalence (1995)	% of sexually active pop.	32.3	..	..	28.7	39.6	38.9
New reported cases of AIDS (1995)	Number	535.0	..	..	..	..	..
Births attended by trained health personnel	% of births	95.0	..	..	..	99.5	..
Diarrhoea episodes	Per 10,000 children	2,804	..	..	3,197	5,207	2,391
Oral rehydration therapy use rate	% of diarrhoea cases	..	..	..	..	..	..
Access to health services (1995)	% of pop. within 15km	88	98	83	100	100	100
Access to safe water (1991) b/	% with access	77.0	100.0	53.0	100.0	100.0	100.0
Access to safe sanitation (1991)	% with access	55	82	26	99	75	94
Population per doctor (1997) f/	Number of persons	3,616	..	..	1,184	1131	1,149
Population per nurse (1997) f/	Number of persons	371.0	..	..	206.9	245.7	122.4
People with disabilities	% of population	2.2	..	..	1.0	1.4	1.8
Full immunisation (1994) g/	% of under-twos	56.7	62.0	53.0	69.8	64.0	57.7
TB immunisation (1998) g/	% of under-ones	66.0	54.0	66.0	22.0	20.0	89.0
Measles immunisation (1998) g/	% of under-ones	80.0	57.8	77.5	51.0	65.0	62.0
4. Educational attainment							
Primary net enrolment rate (1995)	% of age group enrolled	96.7	..	..	91.3	89.5	92.0
Male	% of age group enrolled	95.7	..	..	91.1	89.1	91.0
Female	% of age group enrolled	97.7	..	..	91.5	89.9	92.7
Junior secondary net enrolment rate (1995)	% of age group enrolled	45.3	..	..	..	..	..
Male	% of age group enrolled	39.2	..	..	..	..	..

SELEBI PHIKWE	OTHER TOWNS	CENTRAL	GHANZI	KGALAGADI	KGATLENG	KWENENG	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTHERN
68.8	65.8	64.8	60.7	58.9	67.3	60.9	68.5	59.3	62.3	68.2
83.5	85.6	65.8	56.7	57.6	71.3	62.4	67.3	60.5	72.6	62.3
89.4	91.0	81.8	69.9	82.3	87.0	75.8	91.1	76.1	86.9	81.4
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
79.4	77.9	77.7	64.1	75.3	80.6	72.3	85.8	72.2	79.8	76.9
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
16.5	14.4	34.2	43.3	42.4	28.7	37.6	32.7	39.5	27.4	37.7
0.0	0.0	15.0	40.0	36.0	17.0	5.0	1.0	15.0	0.0	15.0
0.0	0.0	35.2	36.0	18.0	25.0	39.0	16.0	41.7	13.0	12.0
8.8	..	16.3	16.5	19.0	13.1	17.1	11.6	9.2	10.4	17.8
..	..	..	..	..	..	..	..	..	..	..
..	..	19.5	40.0	41.0	15.6	20	..	31	5.1	25
15.3	13.2	33.9	46.0	44.5	22.9	33.1	33.5	43.0	23.0	33.3
34.0	..	6,543	1,407	1,554	440.0	3,311	415.0	1,943	574.0	1,024
11.5			31.2	31.0			22.8	28.2		26.4
40.0	58.0	63.4	91.0	105.0	48.0	91.0	43.0	97.0	45.0	76.0
33.0	45.0	48.8	67.0	76.0	39.0	66.0	35.0	70.0	36.0	57.0
260	156	305	582	239	316	297	298	600	350	365
10.0	..	9.3	16.0	8.0	9.6	9.4	9.6	12.2	8.2	9.0
..	..	29.9	18.9	..	..	..	..	37.9	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	80.5	60.0	59.0	84.4	80	..	69	94.9	75
5,187	..	2,613	4,301	4,390	2,017	1,178	2,400	5,160	3,242	1,641
..	..	..	..	..	..	..	..	..	..	..
100	100	85	60	64	83	95	99	85	100	85
100.0	100.0	64.8	64.0	82.0	75.0	61	16	58.3	87	79
84	95	34	24	31	60	35	36	29	77	57
3,043	..	8,795	4,517	8,634	5,792	7,295	4,731	7,520	4,917	7,097
249.5	..	510.4	297.8	325.8	430.5	582	717	431	400.67	399.1
1.2	1.2	3.2	2.3	2.9	3.0	2.9	2.8	3.4	2.2	2.5
56.2	..	60.1	44.6	..	69.3	39.4	..	49.2	..	..
85.0	..	66.8	89.0	79.0	71.0	58.5	15.0	73.0	87.0	51.0
53.0	..	77.8	93.0	78.5	71.0	76.5	41.0	83.0	92.0	68.0
89.4	91.0	81.8	69.9	82.3	87.0	75.8	91.1	76.1	88	81.4
87.6	91.3	78.7	65.9	78.6	83.7	69.6	90.1	72.7	86.2	76.6
90.9	90.8	84.8	74.2	85.9	83.7	81.9	92.2	79.4	89.7	86.2
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..

INDICATOR a/	UNIT	NATIONAL	URBAN	RURAL	GABORONE	FRANCISTOWN	LOBATSE
4. Educational attainment (continued)							
Female	% of age group enrolled	51.1	. .	. .	. .	. .	. .
Senior secondary (1995)	% of age group enrolled	19.9	. .	. .	. .	. .	. .
Male	% of age group enrolled	19.6	. .	. .	. .	. .	. .
Female	% of age group enrolled	20.2	. .	. .	. .	. .	. .
Primary+Secondary net enrolment rate (1995)	% of age group enrolled	70.5	. .	. .	77.6	81.5	82.0
Male	% of age group enrolled	69.1	. .	. .	77.8	78.8	81.3
Female	% of age group enrolled	71.9	. .	. .	77.5	83.8	82.6
Progression rate: standard 1 to form 1 (1995)	% of standard 1 entrants	77.8	. .	. .	. .	. .	. .
Male	% of standard 1 entrants	71.5	. .	. .	. .	. .	. .
Female	% of standard 1 entrants	84.0	. .	. .	. .	. .	. .
Progression rate: standard 1 to form 4 (1995)	% of standard 1 entrants	29.9	. .	. .	. .	. .	. .
Male	% of standard 1 entrants	28.5	. .	. .	. .	. .	. .
Female	% of standard 1 entrants	31.2	. .	. .	. .	. .	. .
PSLE pass rate(1995)	% of persons taking exam	70.9			87.3	83.5	85.1
Male	% of persons taking exam	. .	. .	. .	. .	. .	. .
Female	% of persons taking exam	. .	. .	. .	. .	. .	. .
JC pass rate(1995)	% of persons taking exam	76.5	. .	. .	86.8	84.4	82.6
Male	% of persons taking exam	. .	. .	. .	. .	. .	. .
Female	% of persons taking exam	. .	. .	. .	. .	. .	. .
Cambridge pass rate(1995)	% of persons taking exam	75.5	. .	. .	79.3	88.3	77.8
Male	% of persons taking exam	. .	. .	. .	. .	. .	. .
Female	% of persons taking exam	. .	. .	. .	. .	. .	. .
5. Incomes and employment							
Size of labour force	Number of persons	544,561	. .	. .	. .	. .	. .
Employment share of formal sector	% of labour force	46.2	30.7	13.5	18.5	5.2	1.9
Employment share of trad. Agriculture (1995)	% of labour force	231,400	. .	. .	. .	. .	. .
Employment share of public sector	% of labour force	11.6	9.3	1.0	6.0	1.8	0.7
Employment share of private sector	% of labour force	31.6	20.3	10.7	12.1	3.3	1.1
Labour force unionisation (1988)	% unionised	4.1	. .	. .	. .	. .	. .
Unemployment rate (1995)	% of labour force	22.2	. .	. .	. .	. .	. .
Total employees of public work progs (1995)	Annual total	61,693	. .	. .	. .	. .	. .
Income distribution (1994)	Share of lowest 40%	11.7	. .	. .	. .	. .	. .
6. Agriculture							
Cereal production (1993)	MT'000s	16.7	2.9	13.8	. .	2.7	. .
Planted area for crops (1993)	Hectares'000s	264	. .	. .	. .	29	. .
Rainfall	mm	414	. .	. .	. .	. .	. .
Whether declared drought year	Yes/no	Yes	. .	. .	. .	. .	. .
Cattle ownership (1995)	% farming HH without cattle	49	. .	. .	. .	. .	. .
7. Gender							
Female share of the population (1991)	% of population	52.2	51.5	52.9	48.9	51.5	51.9
Male share of the population (1991)	% of population	47.8	48.5	47.1	51.1	48.5	48.1
Female life expectancy (1991)	Years	68.4	69.2	62.6	70.0	69.0	67.4
Male life expectancy (1991)	Years	64.8	69.2	62.6	68.6	67.6	66.0
Female adult literacy (1993)	% of female adults	70.3	. .	. .	81.6	86.0	86.9
Male adult literacy (1993)	% of male adults	66.9	. .	. .	73.9	85.2	73.9
Female net enrol. rate, 1st level (1995)	% of age group	97.7	. .	. .	91.5	89.9	92.7
Female net enrolment rate, 2nd level:Junior	% of age group	. .	. .	. .	. .	. .	. .
Female net enrolment rate, 2nd level:Senior	% of age group	. .	. .	. .	. .	. .	. .
Female net enrol. rate, 1st+2nd levels (1995)	% of age group	71.9	. .	. .	77.5	83.8	82.6

SELEBI PHIKWE	OTHER TOWNS	CENTRAL	GHANZI	KGALAGADI	KGATLENG	KWENENG	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTHERN
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
79.4	77.9	77.7	64.1	75.3	83.7	72.3	85.8	72.2	79.8	76.9
79.9	79.6	75.2	61.5	71.9	83.7	65.9	85.9	70.2	77.1	71.6
79.0	76.3	80.2	66.7	78.6	83.7	78.6	85.6	74.1	82.3	82.3
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
74.3	92.1	62.7	43.3	58.5	83.7	72.6	84.8	73	78.4	68.3
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
85.2	85.5	75.5	64.7	57.6	83.7	75.3	83	79.6	81	73.1
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
71.9	..	74.7	..	89.3	83.7	87.6	..	67.7	68.767	71.5
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	83.7	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
3.9	1.1	6.8	0.9	0.6	0.8	1.3	0.4	1.7	0.8	1.6
..	..	..	..	..	..	..	..	..	..	..
0.5	0.3	1.2	0.1	0.1	0.1	0.1	..	0.5	..	0.2
3.2	0.7	5.0	0.6	0.3	0.5	1.0	0.3	1.1	0.7	1.1
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0.2	..	3.3	0	0	0.8	0.8	..	1.2	0.1	7.5
8	..	99	0	1	24	35	..	11	8	49
397	342	243	420	365	386	453	468	476		
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
48.9	45.7	53.1	49.8	51.6	52.7	52.9	54.1	52.2	52.8	53.6
51.1	54.3	46.9	50.2	48.4	47.3	47.1	45.9	47.8	47.2	46.4
69.5	66.4	65.5	61.3	59.5	68.0	61.5	69.2	60.6	62.9	66.6
68.1	65.1	64.2	60.1	58.3	66.6	60.3	67.8	59.4	61.7	65.3
84.7	86.5	66.1	54.0	55.5	77.1	66.9	66.5	57	77	66.7
82.1	84.6	65.4	59.1	61.0	63.4	55.7	68.7	65.2	67.1	55.7
90.9	90.8	84.8	74.2	85.9	90.5	81.9	92.2	79.4	89.7	86.2
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
79.0	76.3	80.2	66.7	78.6	84.0	78.6	85.6	74.1	82.3	82.3

INDICATOR a/	UNIT	NATIONAL	URBAN	RURAL	GABORONE	FRANCISTOWN	LOBATSE
7. Gender (continued)							
Male net enrolment rate, 1st level (1995)	% of age group	95.7	. .	. .	91.1	89.1	91.0
Male net enrolment rate, 2nd level:Junior	% of age group	. .	. .	. .	. .	. .	. .
Male net enrolment rate, 2nd level:Senior	% of age group	. .	. .	. .	. .	. .	. .
Male net enrol. rate, 1st+2nd levels (1995)	% of age group	69.1	. .	. .	77.8	78.8	81.3
Female share of earned income	% of earned income	. .	. .	. .	. .	. .	. .
Male share of earned income	% of earned income	. .	. .	. .	. .	. .	. .
Women in parliament	% of MPs	9.1	0.0	6.3	0.0	0.0	0.0
Women councillors in local authorities	% of councillors	23.1	22.5	23.3	17.2	16.7	38.5
Women in managerial positions (1991)	% of positions	25.7	. .	. .	23.9	25.9	25.4
Women in prof./technical positions (1991)	% of positions	50.6	. .	. .	43.0	51.0	51.6
Women in clerical/sales positions (1991)	% of positions	65.6	. .	. .	68.6	64.7	58.0
Women's share of formal employment (1991)	% of positions	34.1	. .	. .	39.2	39.8	38.2
Women in service positions (1991)	% of positions	38.6	. .	. .	35.4	48.6	44.4
Female headship of households (1991)	% of households	47.0	44.0	50.0	34.0	39.0	37.0
Reported violence against women cases	Number	. .	. .	. .	. .	. .	. .
Gender equality index (GEI)	Index	0.80	. .	. .	0.87	0.74	0.88
8. Demography and urbanisation							
Population	Thousands	1,496	721.0	775.0	175.0	84.0	29.0
Annual population growth rate	% increase per annum	2.4	4.6	1.8	5.5	5.2	2.3
Population share	% of people	100.0	48.2	51.8	11.7	5.6	1.9
Annual growth in population	%	2.4	. .	. .	5.5	5.2	2.3
Total fertility rate (1991)	Chlidren per female	5.2	4.6	5.9	4.6	5.1	5.0
Condom distribution	. .	. .	. .	. .	. .	. .	. .
Dependency ratio (1991)	Per ec. active pop.	0.7	. .	. .	0.3	0.4	0.4
9. Participation and dependency							
Children immunised for measles (1998)	% of under-twos immunised	80			51	65	62
Avoidance of HIV	% sexually active pop.	68.3	. .	. .	68.7	56.9	. .
Youth in education and training (1995)	% of 14-18 year olds (gross)	58.2	66.4	58.5	57.5	73.9	88.6
% of pre-schoolers at pre-school	% of 3-5 year olds	8.7	13.5	2.4	16.0	7.5	18.7
% of adults with formal sector job	% of people aged 15-64y	46.2	71.1	13.2	98.3	71.5	32.2
Number of registered societies	MLHA Reg. of Societies	1,599	1,030	569	752	75	60
Private newspapers	Weekly sales per 100 pop.	4.1	12.2	2.3	16.9	9.4	10.2
New citizen business formation (1994)	New bus. registered (net)	1,795	. .	. .	. .	. .	. .
Teenage girls becoming pregnant (1991)	% of teenage girls	19	. .	. .	12	21	17
People Participation Index (PPI)	Index	0.43	..	..	0.73	0.53	..
10. Social change and social stress							
Serious crimes(1999)	Reported adult cases h/ i/ j/	2,563	. .	. .	15, 652	13.998	16,546
Rape cases	Reported adult rape cases	1,101	. .	. .	. .	..	. .
Divorces	Per 1,000 couples	. .	. .	. .	. .	. .	. .
Registered vehicles	Thousands	128	. .	. .	. .	. .	. .
Road accidents h/ k/	Number	10,338	. .	. .	2,420	1,162	826
Deaths caused by road accidents h/ k/	Number	494	. .	. .	99	67	29
Injuries caused by road accidents h/ k/	Number	8,061	. .	. .	1001	978	362
11. Technology and information							
Use of electricity for household lighting (1993)	% of households	12.3	27.4	1.9	. .	. .	. .
Access to a radio (1993)	% of households	71.1	73.2	65.7	. .	. .	. .
Access to TV (1993)	% of households	15.0	35.3	3.6	. .	. .	. .

SELEBI PHIKWE	OTHER TOWNS	CENTRAL	GHANZI	KGALAGADI	KGATLENG	KWENENG	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTHERN
87.6	91.3	78.7	65.9	78.6	83.7	69.6	90.1	72.7	84	76.6
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
79.9	79.6	75.2	61.5	71.9	77.3	65.9	85.9	70.2	77.1	71.6
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
0.0	0.0	7.7	0.0	0.0	0.0	20	0	0	0	0
26.7	16.7	25.4	14.3	17.4	12.5	25.9	20.0	21.7	33.3	25.0
31.3	16.9	27.7	14.9	30.7	36.0	25.2	20.6	27.9	26.4	26.2
42.2	36.9	57.0	51.3	51.1	57.8	57.1	59.1	40.7	55.4	61.8
41.7	53.2	63.0	60.0	59.4	71.7	71.5	70.9	54.9	70.8	68.5
33.4	28.8	39.6	24.5	28.1	39.7	33.5	41.3	33.8	41.3	33.5
46.4	28.1	61.3	51.0	57.0	63.0	60.4	62.7	46	61.6	65.2
32.0	26.3	53.8	43.0	43.0	49.0	53	57	47.7	48	53
..	..	..	..	..	..	..	..	..	..	..
0.79	0.79	0.82	0.67	0.82	0.70	0.78	..	0.71	..	0.84
45.0	27.0	449.0	27.0	34.0	63.0	186.0	47.0	118.0	52.0	160.0
2.3	4.5	1.7	1.6	1.8	1.7	1.8	1.7	1.7	3.6	1.7
3.0	1.8	30.0	1.8	2.3	4.2	12.4	3.1	7.9	3.5	10.7
2.3	4.5	1.7	1.6	1.8	1.7	1.8	1.7	1.7	3.6	1.7
4.9	4.4	5.8	5.2	5.1	4.9	5.5	5.1	6.4	3.9	5.4
..	..	..	..	..	..	..	..	..	..	
0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	..
53	78	93	85	84	77	41	83	92	65	
62.2	..	..	..	..	..	73	..	67.7	..	78.3
81.7	43.5	62.4	55.0	50.1	55.8	57.4	50.1	48.0	81.4	53.8
11.9	17.7	1.2	7.0	2.9	5.0	1.4	4.4	1.5	12.6	..
55.1	28.2	17.7	31.3	15.9	15.3	1.3	8.4	17.9	14.5	10.2
83	61	149	10	13	103	87	18	15	112	62
8.8	4.9	1.7	0.6	1.6	2.8	1.5	..	2.4	0.9	0.8
..	..	..	..	..	..	..	..	..	..	..
18	16	21	25	17	18	16	19	..	16	..
0.52	..	..	..	..	..	0.27	..	0.29	..	..
8,082	..	16, 309	2,333	..	7,888	5,586	..	..	..	..
..	..	..	..	..	..	..	..	..		
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
602	..	1, 168	221	232	440	520	..	..	..	..
36	..	95	11	7	29	34	..	28.0	..	..
531	..	1,162	155	266	501	540		517		..
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INDICATOR a/	UNIT	NATIONAL	URBAN	RURAL	GABORONE	FRANCISTOWN	LOBATSE
11. Technology and information (continued)							
Connected telephone subscribers	Connected telephone	67,850	..	..	29,668	8,197	2,666
Telephone density	Telephones per 100 persons	4.5	12.2	2.3	17.0	9.7	9.1
Internet users	Number of subscribers	644	644	..	..	..	..
12. Democracy							
Voter registration (1999)	Thousands	459.7	..	..	31.9	19.3	989.1
% voter turnout at national elections (1994)	% of reg. voters that voted	76.7	..	..	72.8	72.9	80.3
% turnout of voting age population (1994)	% of VAP that voted	44.6	..	..	..	..	..
% of opposition seats in nat. assembly	% of seats	33.3	..	..	..	..	..
Total size of armed forces	Thousands	..	..	..	..	..	..
13. Economy -1995							
GDP, constant prices (1985/86)	Pula	5184.8	..	..	..	..	..
Annual GDP growth rate	% of GDP	7.0	..	..	..	..	..
Mining share of GDP	% of GDP	33.0	..	..	..	..	..
Non-mining share of GDP	% of GDP	67.0	..	..	..	..	..
Agriculture share of GDP	% of GDP	3.6	..	..	..	..	..
Manufacturing share of GDP	% of GDP	6.0	..	..	..	..	..
Government share of GDP	% of GDP	17.2	..	..	..	..	..
Government share of consumption	% of GDP	28.9	..	..	..	..	..
Private share of consumption	% of GDP	28.4	..	..	..	..	..
Tax revenue share of GDP	% of GDP	27.5	..	..	..	..	..
Mineral tax revenue share of GDP	% of GDP	17.7	..	..	..	..	..
Rate of inflation	%	10.1	..	..	..	..	..
Exchange rate	$ per Pula, year end	27.0	..	..	..	..	..
Exports	% of GDP	51.2	..	..	..	..	..
Imports	% of GDP	32.6	..	..	..	..	..
Current account balance	P million	936.6	..	..	..	..	..
Total external debt	Pmillion	1438.9	..	..	..	..	..
Debt service ratio	Debt service as % of exports	..	..	..	..	..	..
Net foreign direct investment	% of GDP	..	..	..	..	..	..
Gross domestic investment	% of GDP	24.1	..	..	..	..	..
Gross domestic savings (1994)	% of GDP	25.0	..	..	..	..	..
14. Public expenditure-1995							
Public expenditure as % of GDP	% of GDP	35.5	..	..	..	..	..
Annual growth in real public expenditure	% of GDP	10.3	..	..	..	..	..
Overall budget surplus/ (deficit)	%	5.2	..	..	..	..	..
Health share of expenditure	% of expenditure	4.9	..	..	..	..	..
Education share of expenditure	% of public expenditure	22.5	..	..	..	..	..
Defence share of expenditure	% of public expenditure	8.9	..	..	..	..	..
Ratio of defence to health and educ. expend.	% of public expenditure	32.5	..	..	..	..	..

a/ For details of data sources, refer to Part 1 of this annex.

c/ Data refers to children who are moderately or severely underweight for their age.

e/ Data Kgalagadi refers to Kgalagadi South.

g/ Data for Francistown includes North East; data for Lobatse includes Southern; data for S Phikwe includes Bobirwa; data for Ghanzi includes Kgalagadi; data for Kgatleng includes South East; data for Central consists of Serowe, Palapye and Mahalapye; and data for North West consists of Chobe, Maun and Gumare.

i/ Murder, rape, defilement and robbery.

k/ Data for Kgalagadi refers to Tsabong; data for Kgatleng is for Mochudi; and data for Kweneng is for Molepolole.

SELEBI PHIKWE	OTHER TOWNS	CENTRAL	GHANZI	KGALAGADI	KGATLENG	KWENENG	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTHERN
3,737	3,813	10,655	538	345	2,005	2,614	120	450	324	2,718
8.4	14.1	2.6	2.2	1.1	3.5	1.5	..	2.4	0.6	1.7
..	..	..	..	..	..	..	..	..	..	..
12.8	..	116.1	7.9	10.6	18.5	34.3	11.2	31.8	11.2	42.9
80.7	..	63.6	67.8	73.9	78.1	91.9	76.5	76.5	83.3	79.4
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b/ Access to piped water.

d/ BIDPA estimates.

f/ Data for Central refers to Serowe, Palapye, Mahalapye, Tutume, Bobirwa and Boteti.

h/ Data for Central refers to 1993.

j/ Data combines all types crimes and indicates the crime concentration.

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Successive generations of young Batswana must be enabled to remain HIV-negative. That requires more than providing condoms and preaching safe sex. A social revolution is necessary.

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