It is now well accepted that HIV/AIDS is a challenge for the world community as it transcends boundaries of nation, class, ethnicity and sexual preference.

Over the years, research has shown that HIV is not random in its spread or its impact. An intersection of several variables—poverty, urbanisation, gender inequality and stereotypical gender roles—impacts upon vulnerabilities. Significant factors—such as lack of autonomy for women and girls, discrimination against sexual minorities, abuse of power, lack of basic services, and violence against women—play a key role in determining the most vulnerable constituencies in society.

Human poverty reduces the ability of people to control their circumstances and make choices. Poor people are forced by economic imperatives into living conditions and occupations in which risks to life and health are endemic. In countries that are experiencing widespread impacts of HIV/AIDS, it has been found that prevention initiatives can work only if enabling environments are created for people to effect change in their lives that would help them practice safe behaviour consistently.

Linking HIV/AIDS-related indicators to human development parameters representing long and healthy life, knowledge and a decent standard of living, would support dialogue with policy-makers and stakeholders to set the course for considered action.

This report highlights South Asia's substantial challenge, both in terms of human deprivation and vulnerability to the epidemic. It argues for a comprehensive intersectoral response based on the recognition of the linkages between human development and HIV/AIDS.

This document has been prepared by the UNDP's Human Development Resource Centre and the Regional HIV and Development Programme in collaboration with UNAIDS.

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HIV/AIDS and Development in South Asia 2003

REGIONAL HUMAN DEVELOPMENT REPORT

# HIV/AIDS and Development in South Asia 2003

epidemic
vulnerability
gender inequality
denial
marginalisation
destitution
stigma
poverty
vulnerability
gender inequality
marginalisation

REGIONAL HUMAN DEVELOPMENT REPORT

# HIV/AIDS
## *and*
## Development in South Asia 2003

UNDP

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# Foreword

The Regional Human Development Report on *"HIV/AIDS and Human Development in South Asia 2003"* is the first report prepared under the aegis of UNDP's Asia Pacific Regional Initiative on Human Development Reports (HDRC) and the Regional Programme on HIV and Development (REACH Beyond Borders).

This Report builds upon an extensive corpus of research on human development in South Asia, pioneered by the late Dr Mahbub-ul-Haq and strengthened by successive national and sub-national HDRs. The challenge of HIV in South Asia has been examined in several documents prepared by UN organizations, national Governments, research institutions, NGOs, activists working with HIV programmes and positive people's networks.

It is heartening that this complex and difficult issue is being addressed by a large number of people who recognise the pressing importance of fighting this epidemic before it reaches catastrophic proportions. We do not have the luxury of waiting for a crisis to be thrust upon us before we devise solutions for it.

The Report argues that just as HIV can reverse the gains of human development in the region, largely through the vector of life expectancy, morbidity and prejudice, the lack of human development can also trump the fight against HIV. This Report is the first attempt to examine the dynamics of HIV and human development through a common lens, and suggests possible arenas for action that may lie outside a strictly epidemiological approach. It is also true that a classic public health response that focuses upon "disease control", important as that is, may not be adequate given the fact that there is thus far no vaccine against HIV and the health care infrastructure in the region is in need of ever greater reform and rejuvenation.

The analysis in the Report indicates that the two-way relationship between ill-health and poverty holds particularly true in South Asia. In this context, human development concerns, particularly those of social security, livelihood and human dignity are required to be mainstreamed into efforts to combat the epidemic. As a corollary, it would be essential to include HIV concerns into policies and programmes for human development. A comprehensive response cannot be a mere catch-word or slogan, it needs to become a living reality—on this hinges the success of the struggle against human deprivation and the epidemic in South Asia.

Hafiz Pasha
UN Assistant Secretary General
UNDP Assistant Administrator
Director, Regional Bureau for Asia and the Pacific

# Overview

Globally, the Human Development Reports (HDRs) have placed people at the centre of development discourse and flagged the urgency of focused public action towards international development goals. Several regional, national, and indeed sub-national HDRs pioneered in India have contributed to a worldwide alliance to widen people's choices and meet the challenges of poverty, ill-health and ignorance.

The *Regional HDR on HIV/AIDS and Development in South Asia* examines the complex interplay between disease and deprivation in a scenario where major successes in human development are undermined by persistent challenges. The Report brings together for the first time an analysis of HIV and human development under a common lens in South Asia. The linkages between the two are mutually reinforcing in the sense that HIV can undo gains of human development, and the lack of human development can trump any strategy against HIV.

The Report assesses the adverse impact of HIV on the Human Development Index (HDI) and also the parameters of the HDI viz. literacy, school enrollment, life expectancy and per capita income. It also points out that successful human development in terms of improved literacy, a more functional health system and enhanced livelihoods make for a more effective response to the epidemic in South Asia.

It is vital that dialogue in the region, between statesmen, governments and civil society, be harnessed to focus upon cooperation in arenas such as affordable drugs and treatment through trade agreements, sharing best practices in harm reduction and an enabling policy environment where the struggle against the epidemic is an integral part of the road map for human development.

The Report documents the price of inertia in the fight against HIV and shows that the micro-level impacts at the level of individuals, households and communities are more significant than the macro-level impact, given the current rates of HIV prevalence. It points out that the impact of HIV on firms and businesses affects not only corporate profits but also the livelihoods of workers and the prospects of social security for organised and unorganised workers.

The case is made in the Report that successful outcomes for HIV may also require an enabling framework where rights of people living with HIV/AIDS (PLWHA) are guaranteed and stigma and discrimination are minimised. It analyses the legislative and judicial framework of HIV in South Asia and argues for a closer integration with mainstream constitutional and right to development mandates and institutions.

The Report examines the debate over prevention versus treatment and

overturns the argument that the former is the responsibility of the state and the latter is to be taken care of by private provisioning and market forces. It argues that the success of prevention efforts often depends on effective care and support especially in the light of the principles of Greater Involvement of People with AIDS (GIPA). It also shows the feasibility of access to Highly Active Anti-retroviral Therapy (HAART) in resource-poor settings. It examines the issues pertaining to provision of drugs at affordable prices through mechanisms such as compulsory licensing and parallel country importing, an issue which could be taken up for regional cooperation in South Asia.

The Report points out that the formidable challenge of HIV in the region can be met only when the credo of multi-sectoral responses is translated into reality by ensuring that the concerns of positive people are reflected not only in dedicated public health interventions but also in programmes and policies for livelihood promotion, social security and access to basic services.

While this Report does not purport to convey the views of any of the national Governments in the region, it does signpost, however, the urgency of meeting the challenge of HIV and human deprivation in a region that is critical to the world's ability to meet the Millennium Development Goals. It is hoped that the findings of the Report could spark public debate and help build an enabling policy environment for more effective action.

We look forward to wider discussions in South Asia, within and across countries, which could provide policy options on practical modalities of a multi-sectoral response, access to treatment in resource-poor settings, demystifying the epidemic by building advocacy and information networks for advocacy and ensuring a high priority for HIV and human development in the political agenda.

Brenda Gael McSweeney
UNDP Resident Representative &
UN Resident Coordinator

# Acknowledgements

Combating HIV/AIDS is a critical challenge for human development in South Asia, and as such one of the key Millennium Development Goals that the world community has set for itself. There is now a consensus that public policy is required to address not only the medical or public health issues, but also the socio-economic context, including issues pertaining to human dignity and elimination of stigma and discrimination.

This Report is an attempt to utilise UNDP's principal advocacy platform to make a compelling case for coherent, practical action across sectors and stakeholders, keeping in mind the ground realities of South Asia and the possibility of the epidemic reversing the gains of human development in the region. It marshalls relevant facts and evidence and analyses the two-way linkage between human development outcomes and the trajectory of the epidemic. It is hoped that this would help widen the current development debate on the subject and promote experience sharing across countries and contribute to the 'human development movement' worldwide.

The leadership of Mark Malloch Brown, UNDP Administrator and his vision of the new UNDP as a knowledge network has inspired the preparation of this Report in one of UNDP's key practice areas.

The encouragement by the Regional Bureau for Asia Pacific (RBAP), under the leadership of Hafiz Pasha was valuable. This is the first Report funded under RBAP's Regional Initiative on HDRs in Asia and the Pacific. This Report has been prepared by the Human Development Resource Centre (HDRC), and Regional HIV and Development Programme (REACH Beyond Borders), New Delhi in collaboration with UNAIDS. Subinay Nandy, Joanna Merlin-Scholtes, Kanni Wignaraja and Arusha Stanislaus at the Bureau have extended useful support. Sarah Burd-Sharps and Sharmila Kurukulasuriya from the National HDR (NHDR) Unit at the Human Development Report Office (HDRO) have been our comrades-in-arms, not only facilitating a presentation on the Report at the XIV International HIV/AIDS Conference at Barcelona, but also in facilitating discussions on the NHDR network. We are grateful to members of the NHDR Network, particularly the Cambodia NHDR team and Hakan Bjorkman for their detailed comments, which helped improve the draft. Gillman Rebello and Barbara Lemoine at the United Nations Office for Project Services (UNOPS) were most helpful.

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UNDP's Human Development Resource Centre (HDRC) is a centre of excellence dedicated to human development research, training and advocacy since August 2000. The Centre's objectives are (1) translating the concept of human development into policy-oriented action; (2) creating awareness among national and local policy makers about tools and techniques to mainstream Human Development Report (HDR) analyses into policies and programmes; and (3) facilitating learning and exchange of ideas by strengthening regional and local networks and capacity building. This Report has been prepared under the Regional Initiative on HDRs in Asia and the Pacific, a project sponsored by the Regional Bureau of Asia and Pacific (RBAP), UNDP, New York.

### REACH Beyond Borders Programme, UNDP

REACH Beyond Borders is UNDP's Regional HIV and Development Programme covering 13 countries in the South and North-East Asia region. The programme addresses the development and trans-border challenges of HIV/AIDS in the region and supports integrated and rights based responses that promote gender equality, sustainable livelihoods and community participation. Focus areas of work include policy advocacy and outreach, mobility and HIV/AIDS, capacity development and Greater Involvement of People Living with HIV/AIDS (GIPA) and human rights.

### UNAIDS

The Joint United Nations Programme on HIV/AIDS (UNAIDS) brings together the efforts and resources of eight United Nations organisations. As the main advocate for global action on HIV/AIDS, UNAIDS leads, strengthens and supports an expanded response aimed at preventing the transmission of HIV, providing care and support, reducing the vulnerability of individuals and communities to HIV/AIDS, and alleviating the impact of the epidemic.

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# Abbreviations

| | |
|---|---|
| AIDS | Acquired Immuno-deficiency Syndrome |
| ANC | Antenatal clinic |
| ART | Anti-retroviral therapy |
| ARV | Anti-retroviral drugs |
| CEDAW | Convention on the Elimination of All forms of Discrimination Against Women |
| CGE | Computable General Equilibrium |
| GDI | Gender Development Index |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| GIPA | Greater Involvement of People Living With HIV/AIDS |
| HAART | Highly Active Anti-retroviral Therapy |
| HD | Human Development |
| HDI | Human Development Index |
| HDR | Human Development Report |
| HIV | Human Immuno-deficiency Virus |
| IDU | Intravenous drug users/ Injecting drug users |
| ILO | International Labour Organization |
| IMF | International Monetary Fund |
| MDG | Millennium Development Goals |
| MSM | Men who have sex with men |
| MTCT | Mother to child transmission |
| NACO | National AIDS Control Organisation |
| NACP | National AIDS Control Programme/s |
| NGO | Non-governmental organisation |
| OLS | Ordinary Least Squares |
| PPP | Purchasing Power Parity |
| PLWHA | People Living With HIV/AIDS |
| SAARC | South Asian Association for Regional Cooperation |
| SACS | State AIDS Control Society |
| SHIP | STD/HIV Intervention Project |
| STD | Sexually Transmitted Disease |
| STI | Sexually Transmitted Infection |
| TRIPS | Trade-Related Intellectual Property Rights |
| UN | United Nations |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| UNDP | United Nations Development Programme |
| UNDCP | United Nations Drug Control Programme |
| UNFPA | United Nations Population Fund |
| UNGASS | United Nations General Assembly Special Session on HIV/AIDS |
| UNICEF | United Nations International Children's Education Fund |
| UNIFEM | United Nations Development Fund for Women |
| VCT | Voluntary Counselling and Testing |
| WHO | World Health Organization |
| WTO | World Trade Organization |

# Glossary

### AIDS
Acquired Immuno-deficiency Syndrome is a physiological or medical condition whereby the body's immune system is weakened by Human Immuno-deficiency Virus (HIV) to the extent that it is no longer able to defend itself against attacks by ordinary (and other) ailments. A cure for AIDS has not been found, although research is underway for developing an AIDS vaccine.

### AIDS-related deaths
Deaths linked to AIDS-related diseases such as tuberculosis, pneumonia and diarrhoea.

### Antenatal
Occurring before birth

### Anti-retroviral Drugs
Substances used to kill or inhibit the multiplication of retroviruses such as HIV.

### Cohort
In epidemiology, a group of individuals with some characteristics in common.

### Combination Therapy
Two or more drugs or treatments used together to achieve optimum results.

### Endemic
The standard epidemiological definition of the term endemic is the constant presence of a disease in a given geographic area or within a given population.

### Epidemic
An epidemic is the occurrence of a greater number of cases of a disease than would normally be expected to occur in a population, community or region.

### Epidemiology
Study of the occurrence, distribution and determining factors associated with health events and diseases in a population.

### Gross Domestic Product (GDP)
The total output of goods and services for final use produced by a economy, by both residents and non-residents, regardless of the allocation to domestic and foreign claims. It does not include deductions for depreciation of physical capital or depletion and degradation of natural resources.

### Gender Empowerment Measure (GEM)
A composite index measuring average achievement in the three basic dimensions of empowerment: economic participation and decision-making, political participation and decision-making and power over economic resources.

### Highly Active Anti-retroviral Therapy (HAART)
Treatment regimens that suppress viral replication and progress of the HIV. These treatment regimens have been shown to reduce the amount of virus so that it becomes undetectable in the blood.

### Immune Deficiency
Inability of certain parts of the immune system to function, thus making a person more susceptible to infections.

### Incidence
The number of new cases (e.g., of a disease) occurring in a given population over a certain period of time.

HIV incidence is the number of *new* HIV infections occurring in a specified period of time in a specified population.

### Incidence Rate
The incidence rate is the rate at which new events, or new cases, occur in a specified time in a defined population that is "at risk" of experiencing the condition or event.

$$\text{Incidence Rate} = \frac{\text{Number of new events in a specified period of time}}{\text{Number of people exposed to risk in this period}}$$

### Men who have sex with men
This includes men who report either homosexual or bisexual contact.

### Purchasing Power Parity
A rate of exchange that accounts for price differentials across countries allowing international comparison of real output and incomes

### Prevalence
Total number of people cumulative with a specific disease or health condition living in a defined population at a particular time.

### Prevalence Rate
The prevalence rate is the number of *existing* cases of a disease at a specified time divided by a defined population that is "at risk" of experiencing the condition

$$\text{Prevalence Rate} = \frac{\text{Number of existing events in a specified period}}{\text{Number of people exposed to risk in this period}}$$

### Sentinel Surveillance
Sentinel surveillance is a type of surveillance activity in which specific facilities such as offices of certain health care providers, hospitals or clinics across a geographical region are designated to collect data about a disease, such as HIV infection. These data are reported to a central database for analysis and interpretation.

### Seroconversion
In HIV/AIDS research, seroconversion refers to the development of detectable antibodies to HIV in the blood as a result of HIV infection.

### Seroprevalence
The term seroprevalence refers to the prevalence or prevalence rate of a disease determined by testing blood rather than by testing saliva, urine, or sputum.

### Surveillance
Surveillance is the ongoing collection, analysis and interpretation of data about a disease such as HIV or about a health condition. The objective of surveillance is to assess the health status of populations, detect changes in disease trends or changes in how the disease is distributed, define priorities, assist in the prevention and control of the disease, and monitor and evaluate related treatment and prevention programmes.

*Source*: UNDP, 2002 & Canadian AIDS Society, 2002

# Introduction

*"The microbe is less important, the terrain is most important "*

Louis Pasteur

Chapter 1

# Introduction

## 1.1 The Terrain

In a span of less than three decades, HIV/AIDS has emerged as the single most formidable challenge to public health, human rights and development in the new millennium. Already, over 25 million people have died of AIDS worldwide, with 3.1 million deaths in 2002. The number of deaths is certain to rise in the future. An estimated 42 million people are presently living with HIV/AIDS (with women accounting for 50 per cent of adults living with HIV/AIDS worldwide) and 5 million new infections occurred in 2002 alone (See Table 1.1).[1] The Global Commission on Macroeconomics of Health has recommended that the strategic response to HIV be invested with the seriousness of a mission whose philosophy is one of approaching health as 'global public good'.[2]

The South Asian region may have only around 25 per cent of the world's population but it is home to 40 per cent of the world's absolute poor subsisting on less than $1 a day.[3] Besides, at 4.2 million

**Box 1.1**

### Evolution of HIV epidemiology

Early approaches to HIV/AIDS in the 1980s tended to focus on forms of behaviour (and, therefore, vulnerable groups) as the determinants of the 'epidemic'. Indeed, the early nomenclature for HIV/AIDS included 'Gay Related Immuno-Deficiency Syndrome', thereby associating the syndrome with homosexual activity. Subsequently, this notion was falsified by the fact that multi-partner heterosexuals as well as groups such as children from middle class households could also suffer from the virus. It is now well accepted that HIV/AIDS is a challenge for the world community as a whole since it transcends boundaries of nation, class, ethnicity and sexual preference.

Over the years, research has shown that the HIV is not random in its spread or in its impact. An interaction of several variables-poverty, migration, urbanisation, inequality (particularly gender inequality) and stereotypical gender roles – influence vulnerabilities. Significant factors such as lack of autonomy for women and girls, violence against women, discrimination against sexual minorities, abuse of power and lack of access to health services play a key role in determining the worst-affected constituencies in society.

Even so, studies on HIV/AIDS have conventionally tended to treat HIV in terms of epidemiology, disease prevalence and estimates of infected persons. The primary focus has been on strategies for awareness and public education, along with public health issues such as pharmaceutical research, drug prices, and the privacy versus disclosure debate for healthcare providers. However, the arena of discussion on HIV/AIDS must be widened, given the fact that the epidemic has a social context and there are inter-group differentials in vulnerability to and impact of the virus.

cases, the region has the second largest prevalence of HIV/AIDS in the world (because of the large population base), a problem that can get exacerbated by the high levels of inequality, poverty, social stigma and discrimination that could enhance the vulnerability of people to the infection. There are several reasons for this. Low and inappropriate composition of public expenditure on basic services in most countries limits the access of the poor to health facilities. This reflects the pressure of competing priorities on limited public resources. The quality of public services is also a matter of concern. The high proportion of the informal sector in economic activity and lack of adequate social security also add to the vulnerability of the poor. There is very high mobility of people in the region, especially as

Table 1.1

**Regional estimates of HIV/AIDS–2002**

| Region | Epidemic started | Adults and children living with HIV/AIDS | Adult prevalence rate*(%) | Percentage of women among HIV- positive adults | Main mode(s) of transmission for adults living with HIV/AIDS |
|---|---|---|---|---|---|
| Sub-Saharan Africa | late 1970s–early 1980s | 29,400,000 | 8.8 | 58 | Heterosexual sex |
| North Africa and West Asia | late 1980s | 550,000 | 0.3 | 55 | Heterosexual sex, injecting drug use |
| **South and South East Asia** | **late 1980s** | **6,000,000** | **0.6** | **36** | **Heterosexual sex, injecting drug use** |
| East Asia and Pacific | late 1980s | 1,200,000 | 0.1 | 24 | Heterosexual sex, injecting drug use, sexual transmission among men who have sex with men |
| Latin America | late 1970s–early 1980s | 1,500,000 | 0.6 | 30 | Heterosexual sex, injecting drug use, sexual transmission among men who have sex with men |
| Caribbean | late 1970s–early 1980s | 440,000 | 2.4 | 50 | Heterosexual sex, sexual transmission among men who have sex with men |
| Eastern Europe & Central Asia | early 1990s | 1,200,000 | 0.6 | 27 | Injecting drug use |
| Western Europe | late 1970s–early 1980s | 570,000 | 0.3 | 25 | Sexual transmission among men who have sex with men, injecting drug use |
| North America | late 1970s–early 1980s | 980,000 | 0.6 | 20 | Heterosexual sex, injecting drug use, sexual transmission among men who have sex with men |
| Australia and New Zealand | late 1970s–early 1980s | 15,000 | 0.1 | 7 | Sexual transmission among men who have sex with men |
| **Total** | | **42,000,000** | **1.2** | **50** | |

* The proportion of adults (15 to 49 years of age) living with HIV/AIDS in 2001, using 2001 population numbers.

*Source:* UNAIDS/WHO, 2002

migrant labour, and this creates a large constituency whose movement—in the absence of adequate information, services and choices—increases their vulnerability to HIV.

Table 1.1 compares the magnitude of HIV prevalence in South Asia with that of other regions of the world. It shows that HIV prevalence rates in South Asia (which, for the purposes of this report, includes Iran and Afghanistan) and South East Asia are significantly lower than in regions like sub-Saharan Africa where the epidemic is rampant.

Table 1.2 shows that the estimates of HIV prevalence among adults aged 15–49 years in the nine countries that this study covers range from negligible levels in Bhutan to 0.8 per cent in India, figures that are well below the 8.8 per cent prevalence rate among similar age groups in sub-Saharan Africa.[4]

These low prevalence rates, however, mask a more complex picture and should not be a source of complacency, for several reasons.

- The first relates to *scale*. Nine South and Asian countries account for nearly 25 per cent of the world's population, so that even small rates of HIV incidence translate into large absolute numbers. With an estimated 3.97 million infections, India alone has nearly 10 per cent of all the people living with HIV/AIDS (PLWHA) in the world, with sentinel surveillance surveys showing an advance of HIV/AIDS in several parts of the country.[5] Several urban areas in the western state of Maharashtra and in southern India already have HIV incidence rates among pregnant women coming to antenatal clinics in excess of 2 per cent.[6]
- The second reason is *growth rates*. The total number of PLWHA in Asia and the Pacific grew by 10 per cent since 2001 to 7.2 million.[7] Nepal has seen rapid increases in HIV prevalence rates among sex workers and injecting drug users in recent years.[8] Although the proportion of pregnant women who are HIV-positive – a barometer of the spread of HIV into the general population—in Nepal is negligible, it

*These low prevalence rates, however, mask a more complex picture and should not be a source of complacency.*

Table 1.2

**Estimates of HIV/AIDS in South Asia–2001**

| Country | Number of adults and children | Number of adults (15–49 age group) | HIV prevalence rate among adults (%) | Number of women (15–49 age group) | Number of children (0–14 age group) | Number of deaths (adults and children) |
|---|---|---|---|---|---|---|
| Afghanistan | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| Bangladesh | 13,000 | 13,000 | <0.1 | 3,100 | 310 | 650 |
| Bhutan | <100 | <100 | <0.1 | N.A. | N.A. | N.A. |
| India | 3,970,000 | 3,800,000 | 0.8 | 1,500,000 | 170,000 | N.A. |
| Iran (I.R.) | 20,000 | 20,000 | <0.1 | 5,000 | <200 | 290 |
| Maldives | <100 | <100 | 0.1 | N.A. | N.A. | N.A. |
| Nepal | 58,000 | 56,000 | 0.5 | 14,000 | 1,500 | 2,400 |
| Pakistan | 78,000 | 76,000 | 0.1 | 16,000 | 2,200 | 4500 |
| Sri Lanka | 4,800 | 4,700 | <0.1 | 1,400 | <100 | 250 |

Note: N.A. indicates not available
*Source:* UNAIDS, 2002 C

would be only a matter of time before HIV moves from vulnerable groups into its general population.

- Third, the epidemic is still *relatively recent* in South Asia, at least in comparison to sub-Saharan Africa. So the current relatively low HIV prevalence rate in the seven countries other than India and Nepal may just be a temporary reprieve. Fortunately, this gives the South Asian countries an opportunity to arrest the epidemic at its present stage rather than waiting for it to become generalised in nature.

The following features are associated with the spread of HIV in all these countries.

- High rates of poverty and consequent poor living conditions.
- Gender inequality.
- Incomplete epidemiological transition with high prevalence of communicable diseases such as tuberculosis (TB).
- Low levels of knowledge as a result of which populations will be less than fully aware about methods of reducing risk of HIV infection.
- Migrant and displaced populations.

These relationships will be examined in further detail subsequently.

*Although the HIV/AIDS infection cuts across socio-economic groups, its transmission follows the paths created by economic, social and political inequalities between women and men.*

## 1.2 The HIV Epidemic in South Asia: A Systems Analysis

Both immediate and structural factors contribute to the spread of HIV/AIDS. Most of the responses to date, including across South Asia, have dealt with the immediate factors. These include sexual and social behaviors that place people at risk, inadequate screening of donated blood and multiple uses of invasive instruments without effective cleaning between uses. Most information and behaviour change interventions focus on sexual and drug taking habits and primarily target individuals. In effect, such interventions respond to the consequences of the epidemic rather than addressing the root causes. The persistence of the vulnerable group approach demonstrates that there is still a lack of understanding about the actual dynamics of the epidemic, especially for the general population. Clearly, a systems analysis within a human development framework—rather than a narrower medical or health approach—would be useful here.

Structural factors that contribute to the epidemic are associated with prevailing socio-economic conditions, access to quality health facilities, and the openness of society to face the epidemic and its sexual and behavioural attributes. Socio-economic inequalities (along class, gender, and ethnic lines) have long been known to be constraints to development. Those inequalities shape the patterns of HIV/AIDS as well.

Although the HIV/AIDS infection cuts across socio-economic groups, its transmission follows the paths created by economic, social and political inequalities between women and men. Over the past three decades, as the process of economic liberalisation gathered steam, the inequalities that foster the spread of HIV/AIDS have intensified. Some of those inequalities may appear unrelated—lack of easy access to diagnosis and treatment of sexually transmitted infections (STIs); living away from a family; or working to survive in marginal and insecure jobs—but they are extremely conducive to the rapid spread of HIV/AIDS.

These inequalities present major challenges to policy makers in all sectors and at all levels. It is well known that political decisions about resource allocation and response to diverse needs

and interests have a profound influence on socio-economic conditions. Past experience across the region indicates a certain reluctance on the part of policy makers to tackle these inequalities and a tendency to postpone action because the problems appear insurmountable. However, the issues can be broken down into more manageable and actionable components.

Policy makers should be more sensitive to the importance of creating an appropriate 'enabling environment' for a more effective response to the epidemic. This will include policy changes in areas such as human rights that may not strictly lie within the domain of 'public health'. For example, the shift from public-supported health systems to a mixture of public and private services and cost-recovery measures, such as user charges for once free or low-cost services, is an essential part of the economic liberalisation process, stemming from the decision to reduce public expenditures on health. However, this limits access to health facilities for many people or forces them to re-prioritise their spending to pay for services. It has been argued that the use of health facilities, especially by the lower income groups, tends to decline sharply with increases in fees at public facilities. Thus, the revenue model of 'health sector reforms' may further exclude the poor from adequate healthcare. In India, privatisation is increasing corporate involvement in the provision of healthcare, and there is a risk that concerns of profitability could see low-income groups being left out of quality healthcare.[9]

## 1.3 Rationale for a Human Development Approach

Human poverty[10] reduces the ability of people to control their circumstances and make choices. Poor people are forced by economic necessity into living conditions and occupations with a high level of risk to life and health. It has increasingly been found in countries that are experiencing widespread impact of HIV/AIDS that prevention initiatives can work only if enabling environments are created for people to change their lives in a manner that would help them practise safe and protective behaviour consistently. There is, therefore, a need to look at the epidemic from the perspective of its socio-economic causes and consequences, and analyse its impact on the overall development indices at the national and regional level.

Analysis of HIV/AIDS within a human development framework can offer new insights not only for determining issues for 'bridge populations' (groups that link the vulnerable groups with the general population), but also to offer mainstream development solutions to the challenge of the epidemic.

*Policy-makers should be more sensitive to the importance of creating an appropriate 'enabling environment' for a more effective response to the epidemic.*

There are two sets of issues relating to the linkages of HIV/AIDS with poverty:

(a) the combined effect of poverty and income inequalities on social interactions including sex, patterns of vulnerability and patterns of risk behaviour; and

(b) HIV/AIDS as a cause of further impoverishment of poor people, which can have a devastating impact on communities and the potential to reverse any gains in human development.

Studies indicate that gender issues are at the heart of the epidemic, as women are increasingly being infected. Women are doubly vulnerable to HIV/AIDS. For biological reasons, they are four times more prone to STIs than men.[11] In addition, their low social and economic status and their dependence on men limit their control over their lives, including

**Box 1.2**

### Understanding human development

Human development goes beyond the standard notion of economic development that has come to be synonymous with growth in real income per capita. It includes dimensions such as knowledge (education) and longevity that reflect non-material aspects of 'the quality of life'. Based on the statement in Aristotle's *Nicomachean Ethics,* that "we value wealth not for its own sake but for the sake of something else" the human development framework allows for enhancements in non-economic areas to be a comprehensive measure of well being. Thus, improvements in health, besides being valuable in themselves, have the potential of expanding earnings opportunities for the individual, and also contribute to improved cognitive abilities at school. Improvements in education could, similarly, contribute to improved economic opportunities, besides enabling an individual to be empowered, whether by learning about the means to improve one's health or fight for one's rights in the public sphere. Again, improvements in basic rights–speech, religious freedom, life and liberty–are examples of improved capabilities that would be natural ingredients in the notion of development as discussed by Amartya Sen.

The most popular usage of the human development concept is as an index, referred to as the Human Development Index (HDI). This combines three elements–life expectancy at birth, educational attainment (a weighted average of adult literacy and combined—primary, secondary and tertiary-enrolment rates) and per capita Gross Domestic Product (GDP). Thus, changes in HDI capture changes in three elements that would go into any reasonable interpretation of 'development' as defined above–income, health and education. To calculate HDI, each of the three components is reduced to a dimension index, ranging between 0 and 1, and then a simple arithmetic average of the three is used to compute the HDI.

In addition to the HDI, UNDP has developed a number of other indices to capture the degree of 'deprivation' that populations or specific groups face. These include the gender-related development index (GDI) and two versions of the Human Poverty Index (HPI) (one for developed countries and another for developing countries).[12] The human poverty index for developing countries is an arithmetic average of the illiteracy rate, the probability of not surviving to age 40, plus an indicator of standard of living (a mean of the proportion of population without access to safe water and health services and proportion of under-5 children who are underweight). In contrast to the HDI and the HPI, the GDI focuses on inequalities within populations–in this case the inequalities between men and women. The reason for the development of these myriad indices is not surprising, given the extremely broad way in which the expansion of capabilities can be interpreted. But it is clear that they are unlikely to be able to capture the entire gamut of freedoms that one could think of as going into 'development'.

over exposure to HIV. It has also been observed that the vulnerability of populations to the virus increases in regions where macro policies are less sensitive to gender issues. Furthermore, HIV/AIDS prevention efforts need to address culturally rooted ideas of male identity and behaviour. These are intrinsically linked to gender issues and need to be addressed within the prevention strategies for the epidemic.

## 1.4 HIV/AIDS and Human Development Reporting

Several authors and policy makers have argued that, apart from the obvious implications for the health of PLWHA, HIV/AIDS will have significant impacts on the affected countries, along a number of dimensions. These effects include adverse implications for the rate of growth of real income per capita.[13] Potential effects could also include impacts on the distribution of economic resources, the educational achievements of populations, and other freedoms that people value, including basic human rights such as life and liberty.[14]

In short, HIV/AIDS influences societies in ways that go beyond the purely health or purely economic dimension and into the realm of human development, a goal

that societies cherish. Linking HIV/AIDS-related indicators to development and poverty alleviation indicators would provide necessary information for advocacy with policy makers as well as strategic direction for action.

Political commitment has been shown to be essential for the success of prevention programmes for HIV. Multi-level interventions that seek to involve a variety of partners in coordinated action have been shown to be more successful than isolated, segmented efforts. Moreover, an enhanced and coordinated political, economic and social effort is required to reduce societal vulnerability alongside programmes operating at the individual and community levels.

Mainstreaming HIV and the issues that exacerbate the effect of the epidemic into national poverty reduction programmes as well as gender programmes has been recognised as the key to reducing its impact. This can happen only through effective advocacy tools that will spur ground-level action by the policy-makers.

Since 1990, UNDP's Human Development Reports (HDRs) have emerged as the principal advocacy platform for Sustainable Human Development for UNDP and other agencies. Global, regional and national HDRs have contributed towards raising awareness and generating debates on policies and activities. It has been an extremely useful tool for policy makers, agencies working in the field of development as well as multilateral and bilateral donors to assess the efficacy of current approaches and strategies in order to implement innovative and better programmes. A case in point is the Botswana National Human Development Report on HIV/AIDS, which spurred a public discussion on the accessibility of anti-retroviral (ARV) drugs and the responsibility of the government in providing them. This ultimately led to a decision in 2001 by the country's President to provide free access to ARV drugs. The President also had an abridged version of the report produced for distribution in all senior primary and junior secondary schools.

## 1.5 Purpose of this Report

This report, which is also the first Regional HDR on HIV/AIDS, attempts to examine the connection between the epidemic and the larger challenge of human deprivation in South Asia. In the light of the United Nations General Assembly Special Session on HIV/AIDS (UNGASS) Declaration and the Millennium Development Goals (MDGs) (See Box 1.3), it is especially imperative that the attempt to halt and reverse the spread of HIV goes hand in hand with the eradication of human poverty in the region. However, policy analysis on HIV and human development has, thus far, treated the two separately. This report attempts to explore the conceptual and empirical links between HIV and human development. The objectives of this report, therefore, are:

- to create an understanding of the causes and consequences of HIV within a development framework and thereby to advocate for a shift in development priorities and approaches to HIV;
- analyse convincing data and evidence regarding the socio-economic dimensions of HIV/AIDS, including factors that heighten vulnerability;
- in the light of the analysis and experiences, identify key points for HIV/AIDS and development strategies in the region;

*Multi-level interventions that seek to involve a variety of partners in coordinated action have been shown to be more successful than isolated, segmented efforts.*

**Box 1.3**

## Millennium Development Goals and HIV/AIDS

The Millennium Development Goals (MDGs) encapsulate the development targets agreed at various international conferences and world summits during the 1990s. At the Millennium Summit of the United Nations (UN) held in September 2000, world leaders distilled these key goals and targets into the 'Millennium Declaration', which was adopted by 147 Heads of State and Government and 191 nations. Based on the Declaration, UNDP has worked with other UN departments, funds and programmes, the World Bank, International Monetary Fund and the Organisation for Economic Cooperation and Development on a concise set of goals, numerical targets and quantifiable indicators to assess progress. These MDGs include eight goals, 18 targets and over 40 indicators.

The vital importance of HIV/AIDS within the global development agenda has been recognised in the sixth MDG, which is to **halt and begin to reverse the spread of HIV/AIDS by 2015**. However, not only is reversing the spread of HIV/AIDS a goal in itself, but there are also close linkages between the HIV/AIDS epidemic and the other MDGs. It is clear that the achievement of all the MDGs depends in part on progress in turning around the HIV/AIDS epidemic, while success in the response to the epidemic will not be possible without the achievement of the other MDGs. These linkages further demonstrate the close relationship between HIV and human development, as well as the pressing need for broad-based multi-sectoral responses.

**Linkages between HIV/AIDS and the other MDGs:**

**1. Eradicate extreme poverty and hunger**
The loss of productive capacity among families affected by HIV/AIDS has a major impact on economic growth, food production and nutritional well being (in the hardest-hit countries, economic growth has fallen by 4 per cent and labour productivity has been cut by up to 50 per cent).

**2. Achieve universal primary education**
The quality of education services and teaching is affected because of higher absenteeism among teachers due to illness. More school children are caring for their sick parents and such responsibilities force them to drop out of school. AIDS-related illness eats into family budgets, making it more difficult to pay school fees.

**3. Promote gender equality and empower women**
Girls are more likely to be kept out of school to provide care, or when resources are limited. Women take on the greater burden of caring and face greater economic insecurity when wage earners fall ill. While gender equity, both social and economic, is a critical factor in reducing risk, HIV/AIDS exacerbates gender inequalities and burdens on women.

**4. Reduce child mortality**
Infant and child mortality will continue to increase for the next decade, and possibly longer, due to parent-to-child HIV infection.

**5. Improve maternal health**
HIV/AIDS is increasingly a cause of death among mothers.

**6. Ensure environmental sustainability**
Illness, increased labour demands for caring for patients, and lost labour reduce time for fetching water, especially for women. Human resource losses and costs in water supply services affect delivery and increase the cost of services to households.

**7. Develop a global partnership for development**
HIV/AIDS continues to place additional resource burdens on developing countries.

- document good practices in individual countries and create a case for adapting those that are relevant to the region; and
- to advocate integrated approaches to policy makers and implementers in the region for reducing the spread and impact of the epidemic by mainstreaming HIV response into poverty alleviation, gender equality and other development programmes.

The subsequent report structure highlights the complex interrelationships between dimensions of human development and HIV/AIDS issues, based upon multi-variate regression analysis in Chapter 2. A treatment of the

status, trends and prospects of the epidemic in the context of human deprivation and inadequacy of public health systems in South Asia is undertaken in Chapter 3. It indicates that the region cannot avoid potentially catastrophic consequences unless there is a political will to galvanise resources and catalyse reform for placing high priority on health and human development. The creation of an 'enabling environment' that guarantees human rights and eliminates social stigma and discrimination against PLWHA is imperative. Chapter 4 examines the legal and human rights framework for a response to HIV in South Asia. It argues that there is a need to ensure that the strategies for 'harm reduction' are backed by suitable modifications of laws so that the PLWHA are guaranteed a life with dignity and care, free of social stigma and daily harassment. Emerging issues such as stigma and discrimination, conflict situations and affordability of Highly Active Anti-retroviral Therapy (HAART) in the resource-poor setting of South Asia, dealt with in the previous chapters, form the backdrop of discussion on the way forward in Chapter 5. In the case of treatment, it is argued that there is no trade-off between prevention and care and support. Indeed, effective care and support based on the principles of Greater Involvement of People with AIDS (GIPA) can guarantee more effective prevention strategies. The chapter concludes with a call for greater regional cooperation on HIV issues such as drug pricing, mobility and the integration of HIV into mainstream development programmes. It provides specific recommendations for policy action and programme implementation to further strengthen the public agenda on HIV and human development in South Asia. Building on the analysis of the foregoing chapters, the way forward on this important issue involves building alliances of national, state and local governance with civil society organisations, media and research institutions. A comprehensive response to the challenge of human deprivation in general and the epidemic in particular must involve a widening of the debate across disciplines, specialisations and "single focus" initiatives.

This report does not claim to offer a universal solution or monolithic strategy to tackle what is admittedly a very large challenge. It does however emphasise the urgency of mainstreaming HIV response in all human development-related programmes and, conversely, the critical importance of combatting the epidemic through an integrated human development framework.

*"The epidemic in Asia threatens to become the largest in the world. With more than half the world's population, the region must treat AIDS as an issue of regional urgency. The question is no longer whether Asia will have a major epidemic, but rather how massive it will be.*

*"HIV has already spread to more than six million people across Asia. By not tackling it now, while it is still manageable, the epidemic will have far-reaching effects, destabilising societies and damaging productivity."*

— Dr Peter Piot, Executive Director of UNAIDS, addressing the World Economic Forum's (WEF) East Asia Economic Summit, October 2002

# Nexus between Human Development and HIV/AIDS

*"AIDS is devastating in terms of creating and deepening poverty, reversing achievements in education and diverting meagre health budgets away from other priorities. And by cutting deep into all sectors of society, HIV/AIDS undermines vital economic growth:"*

Mark Malloch Brown, UNDP Administrator, African Development Forum, December 2000

Chapter 2

# Nexus between Human Development and HIV/AIDS

## 2.1 Introduction

This chapter brings out the mutually reinforcing relationship between the vulnerability to HIV and the persistence of human deprivation and the manner in which the HIV/AIDS epidemic shapes, and is, in turn, shaped by the patterns of development in South Asia. "The situation is worst in regions and countries where poverty is extensive, gender inequality is pervasive, and public services are weak. In fact, the spread of HIV/AIDS at the turn of the twenty-first century is a sign of maldevelopment-an indicator of the failure to create more equitable and prosperous societies over large parts of the world."[1]

Conventionally, the analyses of the epidemic and human development in South Asia have been done in a segregated manner. The former has focused primarily on the identification of vulnerable groups, seropositivity estimates and concomitant socio-economic profiles of 'people at risk'. The HDRs, for their part, have analysed literacy, vital statistics and indicators of income, employment and poverty, albeit within an integrated framework. There is, however, a growing recognition that HIV/AIDS is not just a health issue but a fundamental issue underlying the sustainability of human development. This has widened the scope of the present discourse.

### 2.1.1 Status and trends of HIV/AIDS and human development in South Asia

Where do the countries in the region rank in terms of development achievements? Tables 2.1 and 2.2 shed light on some of the components of HDI, and HIV prevalence.

There appears to be considerable variation in achievement, in terms of aggregate indicators such as the HDI and GDI and in individual components of HDI, across even this small group of nine countries. Sri Lanka, Maldives and Iran are at the upper end of the spectrum, with India in the middle and the others (Bangladesh, Bhutan, Nepal and Pakistan) at the lower end.

The same appears to hold true for South Asia's economic indicators such as the proportion of population living below the international poverty line of $1 (1993 PPP), with the exception of Sri Lanka. These already low levels of development indicators are likely to be further affected by HIV, with recent gains in development reversed.

Table T1 (see Technical Note B) highlights changes in some of the indicators of human development in the last two

Table 2.1

**Human development and HIV/AIDS in South Asia (by country)**

| Country | HDI | | Gender Development Index (GDI) | | HIV prevalence (in nos.) 2001 | PLWHA as a proportion of population (15–49 years) (per cent) |
|---|---|---|---|---|---|---|
| | *Value* | *Rank#* | *Value* | *Rank** | | |
| | 2000 | | 2001 | | | |
| Afghanistan | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| Bangladesh | 0.478 | 145 | 0.468 | 121 | 13,000 | <0.1 |
| Bhutan | 0.494 | 140 | N.A. | N.A. | <100 | <0.1 |
| India | 0.577 | 124 | 0.56 | 105 | 3,970,000 | 0.8 |
| Iran (I.R.) | 0.721 | 98 | 0.703 | 83 | 20,000 | <0.1 |
| Maldives | 0.743 | 84 | 0.739 | 68 | <100 | 0.1 |
| Nepal | 0.490 | 142 | 0.47 | 119 | 58,000 | 0.5 |
| Pakistan | 0.499 | 138 | 0.468 | 120 | 78,000 | 0.1 |
| Sri Lanka | 0.741 | 89 | 0.737 | 70 | 4,800 | <0.1 |

# HDI ranking is out of 173 countries.
* GDI ranking is out of 146 countries
Note: N.A. indicates not available
*Source:* Column 1 & 2: UNDP, 2002; Column 3&4: UNAIDS, 2002 C

Table 2.2

**Human development indicators in South Asia, 2000 (by country)**

| Country | Life expectancy at birth (in years) | Infant mortality rate (per 1,000 live births) | Adult literacy rate (% age 15 years and above) | Per capita GDP(PPP US$) | Population below Income Poverty line (%) $1 a day (1993 PPP US$) 1983–2000* |
|---|---|---|---|---|---|
| Afghanistan | N.A. | N.A. | N.A. | N.A. | N.A. |
| Bangladesh | 59.4 | 54 | 41.3 | 1,602 | 29.1 |
| Bhutan | 62.0 | 77 | 47.0 | 1,412 | N.A. |
| India | 63.3 | 69 | 57.2 | 2,358 | 44.2 |
| Iran (I.R.) | 68.9 | 36 | 76.3 | 5,884 | N.A. |
| Maldives | 66.5 | 59 | 96.7 | 4,485 | N.A. |
| Nepal | 58.6 | 72 | 41.8 | 1,327 | 37.7 |
| Pakistan | 60.0 | 85 | 43.2 | 1,928 | 31.0 |
| Sri Lanka | 72.1 | 17 | 91.6 | 3,530 | 6.6 |

* Data refer to the most recent year available during the period specified
Note: N.A. indicates not available
*Source:* UNDP, 2002

decades in the countries of South Asia. The data show that Sri Lanka's HDI, adult literacy rate and life expectancy at birth have grown at somewhat slower rates than that of the other countries, given its already high rates of achievement. With the exception of Pakistan, most of the countries have experienced robust growth in per capita income. The table also highlights Pakistan's economic difficulties

in recent years. The low rate of growth of adult literacy in the Maldives reflects, as in the case of Sri Lanka, its already high literacy rate of about 92 per cent.

## 2.2 Linkages

### 2.2.1 Impact of HIV on human development

The HIV/AIDS epidemic has profound consequences for human development in South Asia. This is because HIV affects not just the health of individuals, but has both a direct and indirect effect on their capabilities, their family and kinship structures, and consequently, on the economic, social and institutional arrangements. These nuanced effects of HIV make it imperative to look at it from a development perspective, rather than a purely public health one. It is also important that the impact be examined primarily through the individuals and households it affects, using a human development framework. Such a broader approach is more conducive to the prevention and management of the epidemic, a combination of which would reverse the incidence.

#### Impact of HIV on different dimensions of human development

Human development is, very simply, the process of enlarging choices. The human development framework looks at how these choices are enlarged by enhancing the capabilities of individuals, and at the outcomes of these enlarged choices. The

**Box 2.1** **Balance sheet of human development and HIV in South Asia**

**Achievements**

- High rates of growth in many countries in the region during the past two decades. India was one of the ten fastest growing economies in the 1990s, even as global recession loomed large
- Rapid progress in education, life expectancy and other human development attainments over the past four decades
- Success of democratic governance despite challenges of ethnicity and structural heterogeneity
- Existence of a vibrant NGO movement—non-profit organisations estimated at nearly 1 million in India alone[2]
- Tradition of community caring and compassion that prepares societies to deal with challenges of global illnesses better[3]
- Formation of dedicated National Programmes, which have played a major role in containing HIV at relatively low prevalence rates in the 1990s, even as the absolute numbers rise

**Challenges**

- Size of economies remains small—the combined GDP of the South Asian countries is less than 70 per cent of the GDP of China and one-eighth that of Japan. The per capita GDP of Iran, the highest in the region is less than 25 per cent of the per capita GDP of Japan
- High levels of income and human poverty and of child malnutrition, poor availability of basic facilities—drinking water, sanitation, rural infrastructure
- Despite rapid progress, the average human development achievements in most countries in the region fall far short of the improvements recorded in the East Asian countries over a similar time span
- Persistent gender inequality—high levels of female illiteracy in all countries except Sri Lanka and the Maldives
- Declining trend in public expenditure for social sectors in the 1990s, due to fiscal stringency and structural adjustment pressures
- Second highest absolute number of HIV positive people in the world

HIV epidemic affects the manner and extent to which these choices are either enlarged or constrained for individuals, groups of individuals and society as a whole.

### *Incomes, poverty and earning capabilities*

There are several ways in which individuals and their households are likely to be economically affected by AIDS. The most visible and immediate impact is on the earnings and incomes of households of PLWHA, especially since HIV affects individuals in their most productive years. As seen in Chapter 1, more than 90 per cent of the world's PLWHA are in the age group of 15–49 years. This group is likely to be part of the labour force, or provide in-kind support to the household. The impact can take the form of lost earnings when individuals are sick or die prematurely due to AIDS. In South Asia, the earnings losses are staggering. Bloom and Mahal (1996) estimate that in Sri Lanka, lost lifetime earnings due to an AIDS death were nearly eleven times the annual treatment costs.[4] In Nepal, they suggest that similar losses were more than four times the per capita income.[5] Prolonged illness also results in loss in savings and asset holdings, both due to an increase in costs, as well as a decrease in the propensity to save due to lower life expectancy.

*Prolonged illness also results in loss in savings and asset holdings, both due to an increase in costs, as well as a decrease in the propensity to save due to lower life expectancy.*

A second, key immediate impact is the change in the disposable income because of increased expenditure on treatment. Several studies have documented the costs of treatment as being more than twice the per capita incomes in selected Asian countries.[6] In India, for instance, the ratio of treatment costs to per capita income was 2.2 while in Sri Lanka it was 1.5. These estimates did not include the costs of ARVs, which could be expected to further push up the economic burden on families and households.

Loss of incomes and earnings can also occur due to the loss of a job because of the stigma associated with HIV infection, even if the HIV-positive individual is not laid up with any of the opportunistic infections associated with HIV/AIDS. In these cases, the discounted value of lost earnings is even greater than in the case of an AIDS death, because treatment costs are incurred without any income being earned. It is apparent that the loss of a job for a young adult has negative economic and, possibly, psychological consequences both for PLWHA and their dependants. It is not the consequences of job loss, however, but the relationship between an individual's HIV-status and job loss that is of concern here. A Mumbai-based NGO in India took up the case of an individual who was dismissed from a public sector company after being found to be HIV-positive during medical fitness tests that included testing his blood for HIV, without obtaining prior consent.[7] A similar example was highlighted in the *Middle East Times*[8] that noted the dismissal of a factory worker in Iran after he was found to be HIV-positive. This discrimination is not confined to South Asia but exists in many other countries as well. In Australia and Canada, for example, individuals were discharged from the armed forces on medical grounds after being found to be HIV-positive.[9]

At the same time, however, there are promising signs of change in this attitude, with examples of how judicial, legislative or policy action can readily mitigate stigma and discrimination. There have been several instances where the courts have ruled in favour of reinstating HIV-affected people in jobs in India.[10] In other countries, there are statutes or injunctions against dismissal solely for being HIV-positive. In Iran, for example, the health ministry appears to have

"banned the expulsion of people suffering from AIDS".[11] However, it is extremely likely that these cases are more the exception than the rule. Since stigma and discrimination are deeply rooted in societal attitudes, legislative and judicial sanctions alone will not be sufficient. Bharat (1999) documents a number of cases where individuals resigned from their jobs where they feared the reaction of other employees if found to be HIV-positive. In one case, the resignation was prompted by the threat of a strike from the labour union.

The HIV/AIDS epidemic also perpetuates poverty across generations, by reducing the economic, social and educational opportunities available to children in affected households. It also increases the burden on the elderly, many of whom become responsible for orphaned grandchildren and other dependent relatives. This burden is now significantly altering social arrangements in sub-Saharan Africa. While this impact of the epidemic has not yet been documented in the South Asian context, as the epidemic spreads, extended social networks will certainly have to bear the burden of care. High levels of ignorance leading to stigma and discrimination could further strain these networks, leading to possible breakdowns in community ties and social capital as infected people and their families face rejection and isolation.

### *Human capabilities*

Apart from affecting income, the epidemic significantly affects both existing capabilities of PLWHA and the opportunities available to them and their family members to further enhance these capabilities. There is some evidence to suggest that members of households affected by HIV/AIDS, especially children, would have lower educational and health levels. This can happen if children have to prematurely leave school to care for the sick, or if the family can no longer afford to educate them after the death of a breadwinner. Within the region, studies[12] indicate the difficulties that children of HIV-positive persons face at school, owing to stigma (See Box 2.2). Further, high rates of HIV/AIDS can also indirectly reduce education levels, if people are unwilling to invest in education if there is little expectation of children living long enough to benefit substantially from it.

Spending on HIV treatment also crowds out spending on nutritional intake and other health inputs, especially as

**Box 2.2** **Exclusion of HIV-positive children from school in response to boycott**

In February 2003, when two HIV-positive children, aged five and seven years, were admitted into a state-run school in the Indian state of Kerala, media reports indicated that the parents of the other 119 students did not send their children to school because of fears that they would contract the virus. In response to this sustained boycott from the other children, and the significant media attention that it received, the Kerala government announced that the two children would be schooled at home at state expense. NGOs responded by challenging the state government's decision to remove the children from the school, arguing that they have a clear right to be educated with other children.

This case raises serious questions as to how such forms of socially sanctioned abuse continue to occur even in a highly educated and sensitised community, and how they can be addressed. It is clear that there is an urgent need for creative new responses that move beyond traditional sensitisation approaches to transform the underlying beliefs, norms and values within communities and to ensure a normative environment in which the rights of person living with HIV/AIDS (PLWHA) can be upheld.

household resources become increasingly limited. HIV also affects the average productivity levels of PLWHA, as well as communities and firms. At the workplace, individual morale and productivity levels are affected by the economic environment in which they operate.

HIV/AIDS also limits the access of PLWHA to health services, other public services and financial and social resources. All this affects their capabilities to develop themselves. In an intensive study of two cities in India, Mumbai and Bangalore, Bharat (1999) documented cases where PLWHA had difficulty in accessing healthcare and support, even from family members. In some cases, family caregivers simply abandoned them, while in others, hospitals and medical care personnel actively discriminated against them. This included isolating HIV-positive individuals from other patients, delaying or avoiding surgery, replacing intravenous procedures by oral procedures, and early discharge of patients from hospitals. The study also noted the inability of medical personnel to preserve the confidentiality of PLWHA. As a result, some patients chose to voluntarily discharge themselves rather than allow their HIV status to be widely disclosed.

*HIV/AIDS also limits the access of PLWHA to health services, other public services and financial and social resources.*

In a small survey conducted among medical personnel in Sri Lanka in 1994, Bloom et al.[13] found that 75 per cent of hospital staff agreed with the statement that "AIDS patients are very infectious and should, therefore, be isolated in separate wards to reduce the risk of infecting medical personnel and other patients." Thirty-six per cent also said that if informed about a patient's HIV-positive status, they would inform other individuals without obtaining the patient's consent.

HIV positive status can also deny access to life and health insurance. This will seriously limit the ability of the affected person (or household members) to afford care that is needed, and will have severe financial implications for the family given the high treatment costs and the premature death of a possible breadwinner. In a region where public expenditure on health is limited, and the private sector is the dominant provider of health services, every incidence of ill-health could lead to a debt trap for poor households. This situation is further aggravated in the absence of universal coverage by an affordable health insurance scheme to provide for the health needs of the poorest sections of society.

***Individual liberties***

HIV/AIDS and its associated stigma and discrimination have significantly curtailed individual liberties in the economic, social and political lives of PLWHA. Social ostracism has often been accompanied by State-sponsored restriction of liberties as well. In the Indian state of Goa, Dominic D'Souza, who had donated blood and was found to be HIV positive, was kept in solitary confinement under the Goa Public Health Amendment Act (GPHAA), 1985, which put anyone testing positive for HIV under mandatory isolation. D'Souza was released from confinement after a lengthy court battle, in which the court held that "it would no longer be mandatory to detain positive people, except in 'justifiable' cases". The GPHAA was later amended and such isolation was made discretionary. Similarly, in Pakistan, an HIV-positive housemaid was sentenced to a three-month stay in isolation at a prison hospital in 1988.[14]

Such official policies also restrict individuals' freedom of movement and

**Box 2.3** **The Greater Involvement of People Living with HIV/AIDS (GIPA)**

The GIPA principles were established at the Paris AIDS Summit in December 1994, and were articulated in the Paris AIDS Summit Declaration. In this Declaration, representatives from 42 countries committed to support the total involvement of people living with HIV/AIDS (PLWHA) in the common response to the epidemic at all levels. The main commitments of the Declaration were to:

- Support the greater involvement of PLWHA through initiatives to strengthen the capacity and coordination of networks of PLWHA and community-based organisations (CBOs), stimulating the creation of supportive political, legal and social environment
- Fully involve PLWHA in decision making, formulation and implementation of public policies
- Protect and promote the rights of individuals, particularly those living with or most vulnerable to HIV/AIDS, through legal and social measures
- Make available necessary resources to better combat the epidemic including adequate support for PLWHA, NGOs and CBOs working with vulnerable and marginalised populations
- Strengthen national and international mechanisms that are concerned with HIV/AIDS, human rights and ethics

Recognising the valuable experience of PLWHA and the importance of their meaningful involvement in every aspect of the response is a crucial element in attempts to arrest the epidemic and mitigate the impact of HIV/AIDS. The greater involvement of people living with HIV/AIDS (GIPA) aims to create space within society for active participation of PLWHA at all levels—from policy and decision-making to implementation.

GIPA has often been interpreted as giving a human face and voice to the HIV epidemic. However, although this is a first step to increase the general awareness and recognition that all individuals, communities and societies are at risk from HIV, it has often led to tokenism where PLWHA have become objects rather than subjects in the responses to the epidemic. In developing nations particularly, the meaningful involvement of HIV-positive is inseparable from the empowerment of PLWHA, many of whom are from marginalised groups and already experience poverty, powerlessness and discrimination. In the South Asian context, therefore, GIPA is increasingly being interpreted as the empowerment of PLWHA to become agents of change in order to transform the norms and values that cause stigma and discrimination, promote respect for human rights and increase the quality of HIV prevention, care, support and treatment responses.

However, despite the global acceptance of the GIPA principles, putting them into practice remains a tough challenge. In South Asia, in particular, PLWHA organisations, groups and networks have been slow to emerge due to multiple challenges such as severe and widespread stigma and discrimination, limited capacity and very scarce resources.

Support is urgently needed for the PLWHA organisations that are now gaining strength within the region and are increasingly trying to influence policy-making as well as working to enhance community-level responses.

their ability to travel, within the region and beyond, whether for employment, refuge, education or, simply, pleasure. Testing migrants and those seeking residence for HIV is a common practice globally and there is mandatory testing for certain populations. A study undertaken for the WHO's Global Programme on AIDS,[15] analysed the then existing immigration laws in 40 countries, in terms of their ability to influence mobility across national borders. It concluded that countries have used one or more of two sets of justifications–reducing public financial burden and reducing risks to public health–to restrict entry on health grounds. Such restrictions are common in the South Asian region. In Iran the standard visa application form inquires whether the applicant has previously suffered from a contagious illness. A worldwide survey of immigration restrictions suggests that curbs on PLWHA are also present in Bangladesh, Maldives, Sri Lanka and

Pakistan.[16] Given that South Asia contributes a large number of workers and domicile residents, these restrictive policies curtail livelihood options for people in the region and violate human rights of migrants and travellers. South Asian migrants working overseas are often deported because of their HIV status with no support or counselling provided.

***Marginalisation and discrimination of vulnerable groups***

The fact that it is marginalised groups—sex workers, migrants, injecting drug users and men who have sex with men—who have so far been most severely affected by HIV/AIDS in South Asia has resulted in these groups being blamed for its spread. This has led to their further marginalisation, stigmatisation, harassment and discrimination. Apart from violations of their rights, this also makes them face greater social exclusion. This, in turn, only increases their vulnerability to HIV and allows the epidemic to spread because they are then less able to access the information, services and support needed to protect themselves and others from infection. They also become more vulnerable to abuse and exploitation, as seen in the sexual abuse experienced by men who have sex with men in Bangladesh.[17] Such increased marginalisation also reduces the livelihood security and opportunities of these groups, thereby heightening their vulnerability to HIV/AIDS by prompting unsafe migration or sex work.

*HIV/AIDS has a negative association with HDI, mainly through a decline in life expectancy at birth.*

***Impact on women***

Nearly 36 per cent of all PLWHA in South and South East Asia are women.[18] The spread of the epidemic in a region with already highly unequal gender relations affects men and women differently. The impact of the epidemic falls primarily on women in four different, though related, ways:

- women shoulder the increased burden of care within the household and the community, in addition to their domestic work and economic responsibilities;
- this increased care or the disease itself lessens the ability of women to work in the formal, informal or agricultural sectors, leading to a further loss of income, reduction in child care and food security;
- in cases where the male members of the household stop earning or die of AIDS, the women are left to provide for the rest of the family, and this can include being pushed into the sex trade; and
- finally, women are often blamed for their family's and their own sickness, and are ostracised by the extended family and community, leading to their bearing the social and psychological burden of the disease as well.[19]

## Measuring the impact of HIV on human development

There have been several attempts to measure the aggregated impact of HIV/AIDS on human development. This section assesses the statistical relationship between HIV and human development and some of its components—life expectancy, educational achievements, and real GDP per capita,[20] particularly for South Asia.

The estimates show that HIV/AIDS has a negative association with HDI, mainly through a decline in life expectancy at birth. For the countries in South Asia, however, the estimated impact of HIV/AIDS on overall human development is likely to have been small, owing simply to the relatively small scale of the epidemic thus far. For instance, in India as a whole, the effect of the AIDS epidemic between 1980 and 1998 would have been to reduce the HDI in 1999 by about

0.003—or about 0.6 per cent below what it would have been in the absence of AIDS. For other countries in the region, with the possible exception of Nepal where it would be 0.4 per cent, the effects will be even smaller, given the currently small scale of the epidemic there.[21]

Given the comparatively sparse coverage of data on HIV, this is likely to be an underestimation and reflects a lower limit of the impact spectrum. Tables T3, T4 a and b and T5 (see Technical Note B) examine three individual components of HDI and their relationship to HIV to identify the main ways by which HIV has influenced HDI, thus far. The HIV/AIDS epidemic has a statistically significant association with life expectancy at birth.[22]

In India, the country most affected by HIV/AIDS in the region, the adverse effect on life expectancy at birth is milder, given the relatively recent origin of the epidemic (about 0.4 years). For India and Nepal, the reductions in life expectancy due to HIV/AIDS turn out to be small, relative to what they would have been in the absence of HIV/AIDS—0.7 per cent and 0.35 per cent, respectively of the no-AIDS case life expectancy.[23]

Table T4 presents Ordinary Least Squares (OLS) results of regressions of adult literacy rates in 1998 on its lagged values and indicators of the HIV/AIDS epidemic. This relationship tends to go in a direction opposite to what intuition might suggest—that is, towards increasing the measured levels of average achievement.[24] On the other hand, disproportionate numbers of AIDS deaths among people who are educated (and rich), as some have argued, may also cause average levels of educational achievement to decline. At the same time, *average* educational capital might also go up on account of HIV, if the epidemic is disproportionately concentrated among the poor who may have less than average amounts of educational capital in the short term. This is consistent with the hypothesis that HIV is disproportionately concentrated among the poor, but further analyses to test the robustness of these findings are obviously warranted. Careful reflection would suggest, however, that the direction of influence could go either way. In the case of children who are HIV positive, a reduced expected length of life, by reducing the returns that they might receive over their lifetime, might cause parents to spend less on educational capital.

In an exercise to study the relationship of HIV/AIDS with the Gender Development Index (GDI), it is clear that HIV/AIDS has a statistically significant negative association with GDI. Tables T7, T8, T9 (see Technical Note B) demonstrate that, as in the case of the HDI, the influence of the AIDS epidemic on GDI is primarily through the life expectancy index, and not by measures of educational achievement. The above finding is not surprising given that both the HDI and GDI values in the South Asian region are comparatively low and the vector of patriarchy is common to all the countries of the region.

These low levels of association are not surprising given the current stage of the epidemic in the region. However, as indicated earlier, this should not be a source for complacency. Examples from other regions, ranging from sub-Saharan Africa to Eastern Europe, have shown that the epidemic spreads rapidly, and once it reaches a certain scale in a country, it has a devastating effect on the economy, the productive capacity of its people and the sustainability of its economic growth.

*In the case of children who are HIV positive, a reduced expected length of life, by reducing the returns that they might receive over their lifetime, might cause parents to spend less on educational capital.*

### 2.2.2 Impact of human development on HIV/AIDS

In this section, the focus is on the obverse of the relationship highlighted previously—the role that variables related to human development play in influencing the spread of HIV, as well as the possible linkages between human development strategies and the response to HIV.

#### Impact of different dimensions of human development on HIV

There are several ways in which human development can influence HIV transmission—the level of economic and educational achievement, standards of health and access to health services, income inequalities, gender relations and the treatment of vulnerable subgroups of the population and basic legal rights to privacy, life and liberty.

*Specifically, indicators such as income, asset holdings, quality of housing, occupation and the level of educational achievement were all strongly and positively associated with awareness of HIV/AIDS.*

It has been argued that the different dimensions of human development affect the vector of HIV transmission. "The rate of HIV transmission is not simply a function of sexual behaviour. Epidemiological, clinical and laboratory evidence shows that HIV infection is evidenced by the same factors that promote the transmission of other infectious diseases. There is an established literature in public health and a century of clinical practice demonstrating that persons with nutritional deficiencies, with parasitic diseases whose general health is poor, who have little access to health services, or who are otherwise economically disadvantaged have greater susceptibility to infectious diseases, whether they are transmitted sexually, by food, water, air or other means."[25]

***Socio-economic conditions***

Within South Asia, there are four sets of analyses whose findings relating to the impact of income levels and educational attainment on protection measures against HIV risk are especially instructive. Basu, Gupta and Krishna (1997), in their examination of the impact of adult death on households in India, found considerable socio-economic variation in AIDS awareness among individuals. Within the South Asian region, they found that although there are adverse impacts of the epidemic, the response mechanisms tend to vary according to the characteristics of the household. Richer households tend to be able to cope better than poorer households, and households where the adult was 'self-employed' tend to cope better than where the adult was employed as wage or salary-worker.

Specifically, indicators such as income, asset holdings, quality of housing, occupation and the level of educational achievement were all strongly and positively associated with awareness of HIV/AIDS. The study also found that the use of disposable needles for injections in the sampled households increased with socio-economic status. Studies of the general population, sex workers, overseas migrant returnee workers in Sri Lanka all showed that HIV/AIDS awareness was much lower among individuals with lower levels of economic and educational achievement. Sex workers in Sri Lanka who earn higher wages (and who were also relatively better educated) were much better informed about HIV/AIDS than brothel-based sex workers and streetwalkers who serve the lower end of the sex market. This was reflected in condom use—only 44 per cent of the streetwalkers used condoms "always", compared to 87 per cent for those who earned more.[26] Another study, using data from a 1993 survey of nearly 600 sex workers in Kolkata, India, found that condom use is negatively linked to the price of a sexual act and positively associated with the level of education. This suggests the key

role that economic returns and education play in the implementation of HIV prevention policies.[27]

It is not always clear to those engaging in multi-partner sex that sexual activity can be safe if condoms are always used. Education and awareness levels matter, as indicated in a recent survey of the literature on the roots of HIV.[28] School enrolment rates and illiteracy rates in the majority of the developing world, and particularly in Africa, are substantially lower than in richer countries. Analyses of household data from Cambodia, Vietnam, Nicaragua and Tanzania shows a strong correlation between both wealth and education on the one hand and knowledge that condoms prevent AIDS, of where condoms can be obtained, and use of condoms on the other.[29]

### *Gender inequality*

Living as they do on the margins of society, poor men, women and girls have to cope with vulnerable environments. Gender discrimination and inequality express themselves in many forms across societies. It is also established now that vulnerability to the infection is not random, nor is the impact. These inequalities not only facilitate the spread of HIV but they also get reinforced in those infected and affected.

There is a growing recognition that the disempowerment of women—because of which they have no control over decisions about their bodies or sexual health—is largely responsible for the pace at which the infection is spreading in this group. UN Secretary General Kofi Annan summed up the problem in his '*Report of the Secretary-General', 2001*: "The gender dynamics of the epidemic are far-reaching due to women's weaker ability to negotiate safe sex and their generally lower socio-economic status." Girls and young women show a higher rate of acquisition compared to men of similar ages.

**Box 2.4**

### Women and HIV

*Care of the Sick:* The care of family members who fall sick as a result of HIV/AIDS adds to the existing burden of domestic and economic duties.

*Loss of Livelihoods:* As care of the sick of dying takes women's time, or a woman becomes sick herself, she may be forced to abandon work in formal or informal sectors, with consequent reduction in family income and food security. Lack of time and resources, sickness and exhaustion may lead to the neglect of children.

*Economic support of the family:* With loss of income as a result of illness or death of the earning member, women are often to support the family and children in whatever way they can. This may include using sex as one of the few avenues of economic support open to her.

*Alienation and stigmatisation:* It is often the woman who is blamed for her husband and/or child falling sick, as well as being railed for her own infection, leading to rejection and expulsion by the family and community.

Socio-economic, cultural and legal conditions influence the degree of decision making capacity a woman has regarding

- the extent and nature of her education;
- the timing and nature of the onset of her sexual activity;
- whether, when and whom she marries;
- the nature of her sexual relationships;
- whether, when and how often she becomes pregnant;
- whether she is allowed to keep her female child;
- whether and where she receives treatment for reproductive health problems;
- whether she is informed about HIV/AIDS and whether she can act if informed; and
- how she survives economically.

In such a context, how can a woman in South Asia protect herself and her unborn child from HIV infection.

Source: AIDS in South Asia: A development challenge, UNDP HIV and Development Programme, 2001

The gendered face of HIV/AIDS is integrally connected to the fact that women bear the major brunt of the psychological, social and economic onslaught related to loss of livelihoods, poverty and care of the sick. Gender norms impact the way in which infected men and women are perceived, thus influencing ways in which individuals cope with HIV/AIDS.[30] Effective implementation of gender sensitive programmes in HIV/AIDS requires an analysis of the differential political economy of risk in the region.

Women constitute the most deprived sections of society and have very limited access to resources, education, training and labour markets. A total of 44 per cent of the world's illiterate women are in South Asia and the region accounts for one-third of the world's maternal deaths.[31] Only some countries like Bhutan have been able to achieve some gender parity, particularly in issues of property and inheritance and women are, therefore, seen to have a greater role in decision-making. However the impact of this is yet to be seen in the context of HIV/AIDS in the country.

*Positive and affected women end up fending for the family, repaying debts, and meeting hospital costs of the spouse.*

The low economic and social position of women in the South Asian region has profound implications on the HIV epidemic. Women typically have limited access to reproductive health services and are often ignorant about HIV, the ways in which it can spread and prevention options. Social and cultural norms often prevent them from insisting on prevention methods such as use of condoms in their relations with their husbands. The congruence between indicators of women's poor status and their vulnerability to HIV demonstrates the close link between patriarchy and HIV in South Asia. The lack of decision-making is reflected in the increasingly high rates of infection among what are traditionally considered low risk population groups.

The vulnerability of women is evident in the high rates of unwanted pregnancies and high prevalence of Sexually Transmitted Diseases (STDs).[32] Women are thrown out of their homes or deserted by their husbands and are forced into situations where they are sexually exploited, whether for work or food security. Employers and recruiters of women working outside their home country often withhold passports and earnings. In Sri Lanka, girls left in the care of friends and relatives, when their mothers have gone abroad as maids, are often vulnerable to sexual abuse.[33]

The impact of HIV is also more severely felt by the women in the family. Positive and affected women end up fending for the family, repaying debts, and meeting hospital costs of the spouse. A study of their clients by Lawyer's Collective, an NGO in Mumbai, India, found that out of the 67 positive women respondents, at least 60 per cent were economically dependent and unemployed and 56 per cent were widows.[34]

In several cases, it is the natal family that provides more support to the positive person than the marital family. This seems an extension of the dowry demands made on the wife's family. As such, the economic costs incurred by the natal family tend to be invisible.[35]

A study conducted by UNICEF indicates that most HIV-positive women became aware of their status only after their husbands are diagnosed to be HIV-positive or even as late as the death of their husbands. Such female-headed households are unable to afford even basic medicines to treat opportunistic infections. A woman experiences dual

stigmatisation—as a widow and especially a widow of a positive man. Discriminatory access to property rights, shelter and care facilities are some issues with which single and widowed women are confronted. If the child is also diagnosed as HIV positive (a likelihood, given the increase in mother to child transmission), the burden on the mother increases.

Studies indicate that the level of education in women is linked to the information they access about HIV/AIDS. A study analysing HIV/AIDS awareness and prevention amongst women in India from the Second National Family Health Survey (NFHS-II, 1998) found that only 18 per cent of non-literate women had heard of HIV while 54 per cent of women with a primary level of education had heard of it. Even here there are regional variations. Women in states such as Tamil Nadu and Kerala with higher rates of female literacy reported higher awareness as compared to states like Bihar.[36]

***Unequal access to resources***

The dualistic pattern of development in South Asia has meant an incomplete epidemiological transition, with the simultaneous prevalence of diseases of poverty (caused due to poor living conditions and poor nutrition) along with diseases induced by affluent lifestyles. This is reflected in the skewed development of health infrastructure and facilities in these countries. Thus, the rich in South Asia access the relatively better-equipped private hospitals while the poor rely to a greater extent on public hospitals. Since the services rendered there are unsatisfactory, they turn to private hospitals for curative treatment though the costs are far higher. Primary healthcare is, thus, a neglected area as is the treatment of communicable diseases.

More often than not, the lack of insurance coverage has serious implications for affordability of care (see Box 2.7). The study by Bloom et al. (1996), using interviews with the staff of insurance companies in Sri Lanka, demonstrated that, as of 1995, individuals with HIV/AIDS were excluded from health and life insurance schemes, with limited exceptions in circumstances where premium requirements had been fulfilled.

Rural–urban economic differences, unequal opportunities, conflict, natural calamities, social factors and exploitation are the main factors behind migration. In many cases, the economic inequality reflects an underlying social inequality – like the lower status of women relative to men, which is reflected in their lower educational status, fewer remunerative opportunities and assets, and access to health. Migration, in itself, does not have an inevitable correlation with HIV, but in the absence of information and access to services and adequate preparedness, mobile populations become vulnerable to exploitation, trafficking and HIV.

*More often than not, the lack of insurance coverage has serious implications for affordability of care.*

***Economic deprivation***

Economic deprivation and HIV/AIDS incidence appear to be linked, and there are a number of reasons why one can expect low levels of economic achievement to be rooted in HIV.[37] The dynamics of the sex industry, for example, illustrates this linkage starkly. Extreme poverty often forces women and young girls into the sex trade, which increases their risk of exposure to HIV. In one study of female sex workers in Sri Lanka, nearly 37 per cent of the women interviewed described the need for "survival" as a major reason for their entry into the sex trade. The numbers were even higher—48 per cent—for streetwalkers.[38] One study in Ichok village in the Sindhupalchowk district of Nepal quotes an interviewee as

**Box 2.5**

## Coping with HIV: different realities

While the virus does not respect boundaries—between nations, classes, gender, ethnicity or culture—both the vulnerability to HIV and the ability to cope with it are influenced dramatically by levels of income. The impact of HIV on individuals is not anecdotal but systemic.

Judge Edwin Cameron from South Africa describes how his access to good healthcare and treatment enabled him to lead an active, healthy and productive life:

"I can take these tablets because of the salary I earn as a judge. I am able to afford their cost…my presence here embodies the injustices of AIDS in Africa …in which 290 million Africans survive on less that 1 US$ a day, I can afford monthly medication costs of about US$ 400 per month. Amidst the poverty of Africa I stand before you because I am able to purchase health and vigour. I am here because I can afford to pay for Life itself".

In striking contrast is the following testimony of Harkan Maya, a woman from a poor Nepalese household.

"My sister's elder son is bed-ridden with AIDS now. He must be only about 30 years old but he's about to die. Not only he, my sister is also suffering. We didn't know what AIDS was, so when we were told that it would be cured slowly we borrowed money for treatment. We also took him to Siliguri [a large town in India] for treatment where we were told that it would make no difference whether he took medicines or not. When we asked him what we should do, he said that since the doctor had said medicines would not make a difference, he would not take them. He's not taking medicines now but his wound is being dressed regularly. Every few days, 80-90 rupees has to be spent on bandages and ointment for him. Instead of being cured, he's losing weight. My sister must feel terrible. Her son has wounds all over his body. Water drips from them, he has to be given medicines, and his wounds need dressings. So my sister doesn't have the time to stay in the shop.

"Income has gone down. A lot of money was spent in the hospitals too. People give all sorts of advice on where he can be cured and once we hear that, even for his sake, we have to take him there. Otherwise, he could feel hurt. In that way, a lot of money was spent. His elder sister took loans and spent it on him. In the hospital he had to have all sorts of tests for his blood, his pus, his bones. So many X-rays were taken. Sometimes they said his hand was broken so it had to be put in a cast, sometimes they wanted the chest X-rayed.

"They had his blood tested three or four times. We had to go from Biratnagar to Dharan, so there were transportation expenses. His hand was swollen, so he was operated upon twice in Dharan. He had to be given four injections a day and they cost 200 rupees each. Then there were the cost of medicine and hospital expenses. The patient had to have good things to eat—fried liver, Fanta, yoghurt. There's no income, just expenses. My sister is fed up. Before her son fell sick, she had no trouble feeding herself. Now my sister is not very well either."

Clearly the impact of HIV has a class bias, with the poor at a great disadvantage when it comes to coping with the high cost of treatment and the loss of livelihood. However it needs to be borne in mind that here we are speaking not only of individual misfortune but a tragedy for the households, communities and society.

*Sources:* Barnett and Whiteside, 2000; Foreman, 2002

saying, "No one can survive on farming only…There would be a famine here without the sex trade."[39] Examples of economic need leading to entry into sex work can be found in Bangladesh and Pakistan as well.[40]

Of course, as the Sri Lankan study suggests, not all women enter the trade for 'survival'. Levels of remuneration are also a determining factor, especially if alternative economic opportunities are not as attractive. For instance, a study of Bangkok massage parlours in 1980 indicated that the average earnings of masseuses exceeded what they earn in occupations elsewhere by nearly 1,700 per cent.[41] This also indicates that quality of employment is as important as the quantity in the context of expanding employment opportunities.

Global economic processes and macro-economic policies serve as a factor in increasing the vulnerability of certain sections of society. Increasing mobility in response to demands for cheap labour and the absence of safe mobility options create situations of vulnerability for migrant workers. Long periods of separation from the family, marginalisation within receiving communities and absence of social capital often lead to the migrant workers seeking multi-partner sex in order to meet their physical and emotional needs. Infection rates among Nepalese workers who had worked in India were found to be substantially higher (10 per cent) than those who had not (2 per cent).[42]

Indeed, a study of the region found that truck drivers routinely "stop at roadside hotels which provide food, rest, alcohol, drugs and sex."[43] Some countries in the region—for example, Bangladesh, Pakistan and Sri Lanka—have not experienced high rates of HIV infection among truck drivers thus far. The evidence available indicates, however, that truck drivers, even in these countries, are at high risk of HIV infection, with some 60 per cent in a recent sample of Bangladeshi truck drivers reporting engaging in commercial sex twice a month.[46] There is also evidence that, based on the relatively significant numbers of reported cases of HIV infection, overseas migrant workers may be at high risk of HIV infection in Bangladesh, Pakistan and Sri Lanka.[47] Evidence of high-risk sexual behavior among domestic migrant workers in India can be found in one study of the Wazirpur industrial area in Delhi.[48]

### *Institutional development and political freedoms*

In all of the above cases, it could be argued that punitive measures associated with HIV status, the role of legal and other restrictions related to the practice of sex work or drug use actually contribute to the spread of HIV, rather than curtailing it. For sex workers under the control of madams, this is self-evident, as the former have little choice in terms of partners and protection from HIV infection. In addition to the anecdotal evidence cited above, a study of sex workers in Nepal found that women who had been 'coerced' into entering the sex trade were three times as likely to be HIV-positive than those who had not.[49] The incarceration of sex workers in rehabilitation homes and prisons is also likely to result in their remaining "underground", an approach that could prevent them from accessing health messages.[50]

The impact of coercive laws can be expected to increase the risk potential of drug user behaviour for three reasons.

- The illegality of drug possession means that drug users might prefer to stay underground, and so are unable to obtain ready access to prevention messages associated with HIV

**Box 2.6** **Poverty, gender and HIV/AIDS**

Sex work that is driven by poverty is likely to foster behaviours that are more risk-taking than might otherwise be the case. Poverty is a compelling reason to accept a client who refuses to use a condom. The journal article by Wawer et al. on their study of commercial sex workers in Thailand quotes one woman sex worker as saying: "Sometimes I will allow it (sex without condom). Sometimes not. If I have no alternative, no money to buy food, I would accept it".[44] Sex workers who are poor are likely to work in low-class establishments or on the street. They are less likely to have access to treatment for other STIs, with such untreated infections being a key co-factor in susceptibility to HIV. Their clients are less likely to be aware of or to take seriously the risks of HIV and other STIs and to take precautions by using a condom. Their own poverty might well play a role here. In a disturbing indication of risk-taking behaviour induced by desperation born of poverty, some commercial sex workers have reportedly opposed the use of condoms on the grounds that it could prolong sexual intercourse, thus reducing the total potential number of clients.[45]

*Source*: Extract from Collins and Rau, 2000

**Box 2.7** **The availability of formal health and life insurance**

In general, formal insurance is not accessible to people with HIV/AIDS due to a variety of excludability clauses[53]. In any event, private insurance coverage is typically quite low in most South Asian countries, as are safety nets offered by the public sector, or public sector insurance coverage. Even the low levels of coverage are hampered by the poor fiscal situation in many of these countries and the predominance of informal sector employment that lies outside the ambit of the formal public sector. One of the few ways in which households can reduce the impact of AIDS is by using public sector health facilities that are often available at subsidised rates to the poor. However, the unsatisfactory functioning of the public health systems in most countries implies that the poor may not be able to access the required treatment at these facilities. Even assuming the required treatment is available, as the epidemic spreads, it places considerable strain on the already stretched capacity of the public health system. This is evident from other developing countries with an advanced HIV/AIDS epidemic, where it has resulted in overburdening the capacity of the public health sector. HIV-related bed occupancy rates in public hospitals in several countries in sub-Saharan Africa range from 25-70 per cent, with obvious implications for the health budget. In any event, it appears that not all households can access services at subsidised rates. A National AIDS Accounts study in Rwanda indicates that less than 30 per cent of the AIDS-affected households had to meet their healthcare treatment expenditure needs from their own resources.

*Source:* Guinness and Alban, 2000

- Drug users might prefer to move to more efficient methods of drug use—injection as against inhalation or smoking—so as to reduce the transaction costs of being caught while possessing drugs.[51]
- When either drug or paraphernalia possession is illegal, it would be beneficial for injecting drug users to share injecting equipment, and not have everyone carry their own equipment in order to reduce the risk of being suspected of carrying drugs.

***Family and community health levels***

Health status too, can affect HIV transmission. There could be behavioural factors as individuals with a lower life expectancy may have low self-esteem and low levels of health-seeking behaviour and might take risks with their health—including exposure to HIV infection—compared to those in better health. This has adverse implications not only for the individual but the household and community as well. Lower investment in human development in terms of health and education would lead to lower human capital. Thus, even from the narrower human capital perspective, "the lower the optimal investment in health human capital, the fewer are the periods in which a return to the investment can be expected".[52] This indicates that the constraints and opportunities in the enabling environment of human development have a direct bearing on the ongoing relation to HIV (See Box 2.8 as a best practice example).

### 2.2.3 Human development and HIV infection: cross-country evidence

At a macro level, there is a systemic link between human development and HIV across countries. The analysis shows that human development achievements, including a higher real income per capita and lower degree of economic inequality as measured by the gini coefficient,[54] tend to contain the extent to which HIV prevalence is increased owing to the duration of its presence in a population.

Treating the time span of the epidemic as constant, the analysis also indicates that the major indicators of human development achievements are also strongly associated with HIV incidence, and their effect is to *lower* HIV incidence. The other variable that has a statistically significant effect on the HIV prevalence rate (at 5 per cent or 10 per cent levels of significance) is economic inequality as measured by the gini coefficient. The

**Box 2.8**

### HIV prevention efforts and human development: NGO experience from Sangli

The case of Vaishya AIDS Muqabla Parishad (VAMP) formed in 1996 in southern Maharashtra in India provides lessons for addressing the problem of HIV/AIDS among commercial sex workers. There are two collectives–with 2,000 to 3,000 sex worker members in each group–both emerging out of the work of an NGO called SANGRAM based in Sangli, Maharashtra.

SANGRAM's goal was to create a sustainable response to the AIDS epidemic by treating women in sex work as individuals who could be empowered to change their circumstances. It had its basis in the belief that sex workers could become agents for change for both themselves and the broader community. The activities of VAMP and SANGRAM involve peer education programmes in which sex workers disseminated information about HIV/AIDS to others in the trade, distribution of condoms, training and counselling women who were unable to enforce condom use by clients and helping women get access to medical care. One immediate outcome is that members of VAMP do not think of themselves as victims but rather as members of a community with mutually beneficial goals. Apart from running the condom distribution programme, VAMP members represent the interests of their community in different ways. They arbitrate community disputes, lobby with the police, help women access government programmes and develop leadership potential. For example, they frequently mediate disputes between sex workers and the powerful brothel owners. Through discussions with the crime investigation units of the state and local police, raids on sex worker establishments have been greatly reduced*. By slowly building a common identity with other women in sex work, VAMP members are beginning to place their own demands on policy platforms. These relate to de-criminalisation of sex work, better medical care at public hospitals in regions where VAMP operates, and ending police raids on brothels. Moreover, one key HIV-related outcome appears to have been high rates of condom-use based on self-reports in a recent survey carried out among 600 sex workers in areas where VAMP operates.

* communication with Meena Seshu, SANGRAM

*Source*: Mahal et al., 2001; Misra, Mahal and Shah, 2000

results of Table T6 (see Technical Note B) indicate that, all else being the same, a greater degree of economic inequality is associated with higher HIV incidence and prevalence in the adult population. Further, the effects of all these variables become larger in size the greater the length of time an epidemic is prevalent in a given population. This is a desirable outcome, given that an initial infection of HIV is likely to be associated with several secondary infections.[55]

## 2.3 The Price of Inertia: The Costs of HIV at the Sectoral and National Level

In addition to impacts at the level of the individual and the household, HIV/AIDS can also have implications at the level of specific sectors and national economies, which, in turn, have direct and indirect effects on human development. The high costs to the government in the form of lost services, lower national productivity and output, loss in skills and experience, depletion of workforce in specific sectors, increased demands on health and social sectors, and loss of human capital can push the country into a vicious circle of poverty. The epidemic can lower human development outcomes as resources are used up in combating the disease, leaving future generations worse off, and undermining the premise of sustainable human development. This section presents a discussion of the impacts of HIV on four sectors—health (including health insurance), agriculture, private industry and transport—and the costs to the country as a whole.

*A national AIDS accounting exercise recently conducted for Rwanda suggests that nearly 10 per cent of all health spending, public or private, was accounted for by HIV/AIDS.*

***Health sector***

The relationship between HIV and health is obvious. But have its impacts been reflected at the sector-level, say, in terms of an increased burden on health services, increased share of health budgets, and on the health insurance sector? Public expenditures on HIV/AIDS for countries in the South Asian region are small, as in Sri Lanka and India.[56] Scenario analyses undertaken in Bloom et al. (1997) indicate that the effect of HIV/AIDS on bed occupancy, while small in magnitude, could still be severe given that excess capacity (supply of inpatient days relative to demand) appears to be extremely limited at present. This study also points out that an expanded HIV/AIDS epidemic could constrain the supply of medical personnel, many of whom revealed that they would need to be compensated monetarily for increased risk of HIV infection.[57]

There is more evidence from countries with a longer experience with the epidemic, particularly from sub-Saharan Africa, which hold useful lessons for South Asia. Guinness and Alban (2000) cite studies from Burkina Faso, the Democratic Republic of Congo, Uganda and Tanzania indicating that bed occupancy attributable to HIV/AIDS exceeded 50 per cent in selected hospitals in countries with HIV-prevalence rates of 5-10 per cent around the time the study was conducted. For countries with HIV prevalence rates in excess of 10 per cent (Cote d'Ivoire, South Africa, Swaziland, Zambia and Zimbabwe), available data suggests that bed occupancy due to AIDS ranged from 25-70 per cent in urban hospitals.[58] Guinness and Alban also summarise studies that indicate significant shares of the health budget being accounted for by HIV/AIDS—20 per cent of the Malawi health budget in 1996 and 13 per cent of the Swaziland health budget in 1994. In Cote d'Ivoire, about 5.7 per cent of public health spending in 1995 was AIDS-related, the corresponding figure for Tanzania being 3.1 per cent.[59]

Public health spending is not the only casualty. A national AIDS accounting exercise recently conducted for Rwanda suggests that nearly 10 per cent of all health spending, public or private, was accounted for by HIV/AIDS. Besides, over 90 per cent of all spending on treatment and prevention of HIV/AIDS took the form of out-of-pocket spending by households.[60]

Compared to studies on the impact of HIV/AIDS on health services and public health spending, there are very few analyses of the effect on the private health insurance sector. A major reason for this could be the exclusion of HIV-positive individuals from the pool of insurable individuals, as suggested by a study for Sri Lanka.[61] Examples from other regions may be instructive in this regard. One Zimbabwean insurance company estimated that 45 per cent of its health insurance claims in 1995-96 were AIDS-related.[62] Insurance companies' reaction to HIV/AIDS is another way to discern potential impacts of the epidemic. Thailand's American International Assurance (AIA) works with NGOs to promote HIV-prevention among factory owners. The company gives financial incentives and discounts to companies with strong workplace and community prevention programmes.

***Agricultural sector***

Given its disproportionately high impact on young adults, it is safe to assume that HIV/AIDS will have a significant impact on agricultural activities, which are largely labour intensive. Studies from Africa may not be completely indicative for the region, but they illustrate possible scenarios for the

future. A study for Rwanda estimated that the loss of a female adult member of an agricultural household could lead to a nearly 50 per cent decline in its farm labour inputs, and similar results have been documented elsewhere in sub-Saharan Africa.[63] Some of the consequences of this has been a shift to less labour-intensive cash crops, declines in cultivated areas, and less animal husbandry.[64] In Zimbabwe, household survey results suggest that AIDS-affected households experienced significant declines in production on average—61 per cent in maize production, 47 per cent in cotton production, and 37 per cent in groundnut production.[65]

The effects of HIV/AIDS on national or regional agricultural production levels, however, have not been as well documented. A major reason could simply be the substitution of this lost production by increased agricultural production among households not affected by AIDS, a process facilitated by land transfers/sales from AIDS-affected families to such households. The only sector-level estimates available are from computable general equilibrium (CGE) model-based simulations undertaken by Arndt and Lewis (2001) for South Africa, which show that value added in the agricultural sector in that country would be 17 per cent lower in 2010 under a projected AIDS scenario compared to a situation of no AIDS.

***Private sector***

HIV/AIDS has the potential of influencing private firms' operating in non-agricultural sectors along these same lines—costs of worker replacement, absenteeism, insurance expenses, and healthcare expenditures. In addition, there is the possibility of legal action related to discrimination against HIV-infected employees and possible loss of customer base. Non-economic factors, in the form of loss of morale in the work force as workers lose many of their colleagues to AIDS or if HIV-positive workers are stigmatised, could also affect productivity.[66] The evidence on the economic impact of HIV/AIDS on the private sector thus far is, however, mixed. Using data from a survey of nearly 1,000 firms in sub-Saharan Africa, Biggs and Shah (1997) concluded that the impact of AIDS on staff turnover was minimal. However, they did find that replacing professional staff—often thought to be at high risk, based on early studies in Africa—to be a significant problem, with firms taking 24 weeks to replace a deceased professional, compared to two to three weeks for less skilled staff. Indeed, there are examples of multinationals in South Africa hiring three workers for each skilled position to ensure that replacements are on hand when trained workers die.[67]

HIV/AIDS could adversely affect the customer base of companies, since the group hardest hit by AIDS—young adults of working age—is also the group with more purchasing power. Spending will be redirected away from a host of sectors to the health sector, which could see increased demand. Such effects are not readily detected by individual firms because of the dissipation of spending implications across local and international economies. Effects on the customer base are more likely to be transparent if there are dominant firms, or firms organised into business associations.

***Transport sector***

Several analyses have focused on the role of people involved in the trucking industry as a facilitating factor in HIV transmission.[68] There are also a few analyses of the impact of HIV/AIDS on the transport sector, relating to railways and the trucking industry. A study[69] of the socio-economic impact of HIV on the

*A study for Rwanda estimated that the loss of a female adult member of an agricultural household could lead to a nearly 50 per cent decline in its farm labour inputs.*

**Box 2.9** **The impact of AIDS: business as usual?**

In the early years of the AIDS pandemic little thought was given to the role that businesses might play in HIV prevention, and the workplace was not seen as a major venue for interventions. Globally, as the impact of HIV becomes more visible, business leaders are increasingly seeing the advantages of creating HIV/AIDS programmes. At the broadest level, businesses are dependent on the strength and vitality of their workers and customer base. HIV/AIDS increases the cost of doing business, reduces productivity and depresses overall demand. The visible effect of AIDS at the workplace is a concern for managers at all levels, from the shop floor supervisors to the top management. Apart from loss of experienced personnel, increased recruitment and training costs and higher labour turnover, there is also evidence of absenteeism due to AIDS-related illnesses, the need to care for others, and to attend funerals. In Chennai, capital of India's southern state of Tamil Nadu, industrial labour absenteeism was expected to double because of AIDS. Given the vulnerability of firms to HIV, their individual workers and the households and communities to which they belong, it makes eminent sense to invest in preventive care and support programmes to stem declining business productivity, profitability and workers' incomes.

*Source:* UNAIDS, 1998

transport sector in India identified a number of economic weaknesses within the industry, influenced by the detrimental effects of HIV/AIDS. It argues that the loss of productivity of drivers with HIV will lead to revenue losses, forcing companies out of business since the "cost of maintaining the current level of death benefits may overwhelm many businesses". The study also noted that only a few companies are prepared to cope with HIV and may insist on mandatory testing or end medical benefits.

Giraud (1993) developed a methodology to assess and predict the impact of HIV among long-haul truck drivers on Thailand's trucking industry in the 1991 to 2000 period. The scenario undertaken in that study led to Giraud concluding that HIV/AIDS-related costs to the trucking industry would increase from an estimated $40,000 to nearly $14.5 million by 2000. Another more recent study, of the Uganda Railway Corporation, concluded that HIV/AIDS had substantially increased the labour turnover rate for the Corporation and that nearly 10 per cent of its employees had died of AIDS in the years preceding the study.[70] Another set of results is available from the CGE analysis of Arndt and Lewis, who report that the transport sector in South Africa would have 20 per cent lower value added in 2001 under a projected scenario of the AIDS epidemic, relative to a no-AIDS scenario. Although few in number, these studies taken together suggest that the transport sector could be a possible major casualty of HIV/AIDS. Available data do indicate, however, high risk behaviour being common among truck drivers in the region.[71]

## Cost to nations

### *Impacts on national economies*

Two types of impacts are worth noting here—on aggregate outputs (or outputs per capita) and the distribution of national income. The two, taken together, have implications for the proportion of national population living below the poverty line, as well. This sub-section assesses primarily the impact of HIV/AIDS on national economic growth for the countries of the region.

### *Impacts on growth of real income per capita: some new evidence*

New evidence on the links between HIV/AIDS and growth of real income per capita, shows that the epidemic would have reduced the worldwide annual rate of growth of real GDP per capita by nearly 0.06 percentage points below what it would have been in the absence of AIDS during the 1980-98 period. In the countries of sub-Saharan Africa, the reduction in the annual rate of growth of income per capita is estimated to be of the order of 0.15 percentage points in this same period. Given the exceedingly small rate of growth

of cumulative AIDS prevalence among countries in the South Asian region during 1980-98, the AIDS epidemic has had a negligible impact on economic growth thus far, even in India, the country with the highest number of HIV cases in the region.

***The returns to policy action in HIV/AIDS***

The tools of cost-benefit and cost-effectiveness analyses—that compare the benefits of a policy to its opportunity costs—are standard methods used by economists to evaluate alternative policy options.

Cost-benefit analysis compares the benefits of a policy action to its costs, both of them evaluated in monetary terms. In Sri Lanka, studies have shown that preventing HIV transmission via the screening of blood used for transfusion, and the use of disposable, instead of reusable, injecting equipment in hospital settings can yield benefits that are much greater relative to costs.[72]

Cost-effectiveness analysis typically compares an outcome indicator such as lives saved and disability adjusted life years averted[73] that is *not* measured in monetary units, with costs that are measured in monetary units. There are studies demonstrating the potentially high cost-effectiveness ratio of programmes such as needle exchanges, STD prevention, information provision.[74] Cost-effectiveness analyses for health interventions (including HIV/AIDS) are not always useful for policymakers when comparing with policies in sectors other than health, since the former have outcome indicators in units other than money. Thus, cost-benefit analyses are typically preferred since both benefits and costs are reduced to monetary units, provided, of course, policies in other areas are similarly evaluated.

**Impacts of HIV on poverty and equity**

It is true that 95 per cent of those infected with HIV live in developing countries, home to 80 per cent of the world's population. At the global level, there is a statistically significant association between low income and HIV prevalence rates—the poorer the country, the greater HIV prevalence rate. Moreover, absolute poverty rates across countries—defined as the proportion of population living below the poverty line of $1 per day—are positively associated with national HIV prevalence rates. There is a positive and statistically significant correlation between HIV and economic inequality as well.[75] Nonetheless, beyond these correlations, the *direct* impact of HIV on poverty and inequality has not been demonstrated empirically at the national level. This is remarkable, given the global two-way links between the HIV and indicators of economic well being.[76]

Education is not the only factor highlighted by micro-data. There is evidence that poverty forces people to make sub-optimal choices and this puts them at risk of HIV infection. As already mentioned, a series of small-scale studies from Sri Lanka, Brazil, sub-Saharan Africa and Haiti show how poor women can be forced into sex work, or be sexually exploited, and are less able to insist on condoms use.[77]

*There are studies demonstrating the potentially high cost-effectiveness ratio of programmes such as needle exchanges, STD prevention, and information provision.*

## 2.4 Implications of the Analysis

The sections of this chapter highlighted the gamut of human development dimensions that are affected by, and in turn, impact HIV/AIDS. These, additionally, demonstrated the effects of HIV on incomes, asset holdings, education, health, liberty and other elements of human development.

**Box 2.10**

## Does it pay to intervene early?

Are there greater returns from intervening earlier, rather than later, in the HIV/AIDS epidemic? There has been little analysis of this so far, although it is possible to visualise the challenge of choosing the optimal timing of policy as a technical problem with three key components. These are:

- The reduction in costs (in present discounted value terms) of waiting one more period instead of implementing the policy immediately;
- the added benefits of implementing the policy immediately in terms of the lower number of HIV infections in the current period; and
- the difference in the number of HIV infections (if any) from implementing the policy now versus one period later, in all future periods than the current period.

To see this decision problem clearly, suppose that a country has two new HIV infections in time period 1, and that the number of new infections doubles each year in the absence of any intervention. So there are two new HIV infections in year 1, four in year 2, eight in year 3, 16 in year 4, 32 in year 5, and so on. Now suppose, there is an intervention that costs C in each year starting from the date it is first implemented and which reduces the number of new infections by half each year. Then, if the intervention is introduced in year 1, the time profile of new HIV cases is 1,1,1,1,1… if the intervention is introduced in the first year. If first introduced in the second year, the time profile is 2,2,2,2,2… If the money value of an averted HIV case is V, then the problem of waiting one more period before implementing the policy becomes one of comparing V/r (r is the discount rate and V/r is the added discounted benefit of implementing the policy immediately versus waiting one more period) and C. If V/r exceeds C, then the policy ought to be undertaken immediately. Otherwise, it might be worthwhile to wait one more period.

The above example suggests that the nature of the policy intervention is also likely to be a crucial factor in the decision on whether or not to wait before implementing a policy. Where individual behaviour is less likely to be important in subverting policy, early intervention may be useful, as in the blood screening programmes. On the other hand, in a regime of low HIV prevalence rate, an intervention that provides information about averting HIV risk from unprotected sexual activity may not be very useful in influencing high-risk behaviour if people perceive the risk to be small. In a high prevalence rate setting, such information provision may actually influence behaviour towards activities at lower risk of HIV infection. That may call for such intervention to be introduced a bit later. However, to the extent that people are more likely to undertake 'private' preventive action only when the AIDS epidemic starts becoming more visible, publicly supported HIV prevention programmes may have to be introduced early. The net effect on the timing of policy is dependent on the relative strengths of these two effects.

Analyses conducted for Sri Lanka (a low HIV-prevalence rate country) suggest that it may be cost-beneficial to set up blood screening programmes and to introduce disposable, instead of reusable cutting equipment even when HIV infection rates are extremely low, at 0.08 per cent.[78] The study compared the returns from introducing a universal blood donor pre-screening and testing programme to its costs at these low HIV-prevalence levels and found that the rate of return over cost was 16 per cent, provided downstream infections were included for the next ten years. Thus, the policy of introducing a screening programme could be interpreted as saying that it was better to introduce the programme immediately, if the only comparison were a policy to be introduced ten years later.

The subsequent cross-country data are consistent with this two-way linkage. A first set of analyses show that the HIV epidemic has a statistically significant association with human development as measured by the HDI, primarily through its influence on life expectancy at birth. The effects of HIV/AIDS on literacy and other indicators of educational achievement and GDP per capita are not apparent, at least statistically, for the period of the study. A second set of cross-country econometric analyses highlighted the relationship between human development and HIV prevalence, specifically indicating the role of literacy,

health and economic status, economic inequality and indicators of international mobility as possible factors in influencing HIV prevalence. These qualitative analyses also showed that the exposure of individuals to, and adoption of, many of the standard prevention methods for HIV—condom use, the use of clean needles, contacts with the formal health system and healthcare and prevention messages—appear to be contingent on achievements in the human development arena.

The two-way link noted above should not be taken to mean support for a programme that focuses solely on HIV prevention, with the idea that this would promote human development, in turn leading to reduction in HIV transmission, and so on. Rather, the key point to note is that these relationships suggest that the success of the prevention programmes themselves may depend on gains in the human development arena. This is reflected in the discussion on the potential influences on condom use patterns, needle sharing habits and access to healthcare and information. It is best perceived as lending support to HIV prevention efforts that go beyond a narrow technical focus on prevention and attempt to integrate such efforts within a broader programme of human development.

The popular misconception that human development approaches to the epidemic are too time-consuming need to be reviewed and revised. On the one hand, key elements on the human development front can be addressed in the short run. These include, for example, the functioning of law enforcement agents in a manner that protects the rights of those vulnerable to, or living with, HIV, and often just require a fairer application of existing laws or a revision of laws that are not enabling. On the other hand, human development responses provide effective entry points to contain the spread of the epidemic and mitigate its impact in a region where the epidemic is not visible and denial and stigma and discrimination are high. They also provide sustainable solutions having multiplier effects that go beyond the epidemic itself.

## 2.5 Conclusion

While the AIDS epidemic has a definite economic impact, it has not always been possible to measure it empirically with a reasonable degree of precision. Moreover, while there is some evidence of negative individual, household and firm level-impacts, the empirical evidence on the impacts at the sector and national levels is weak. Much of the evidence available is with respect to sub-Saharan Africa and evidence for the countries being studied in this report is scarce. Further work may be necessary to provide conclusive evidence of the size and nature of the effects in the region.

*The key point to note is that these relationships suggest that the success of the prevention programmes themselves may depend on gains in the human development arena.*

A more fundamental aspect that this discussion raises is that of viewing the macro impact, which is an instrumental approach, located in the conceptual framework of human capital where investments in people's skills is seen as providing a greater return in terms of increased productivity, improved workforce management etc. On the other hand, our analysis has demonstrated that, within South Asia the micro-economic impact of HIV—at the level of individual household, communities and firms—is more significant than the macro economic impact. It would, therefore, be appropriate to go beyond the cost-to-national economies discourse and focus strongly on the psycho-social dimensions at the grass-roots level – for the individuals and households that directly confront the

epidemic and live with the virus on a daily basis. Clearly the human development framework, which places people at the centre as empowered beings and not as factory inputs is well suited to enshrine the principle of GIPA. It may be instructive at this point to listen to the voices of PLWHA and build their concerns systematically into not only programmes pertaining to HIV and public health but also address their concerns regarding livelihood, social security and a public existence cleansed of stigma and discrimination.

> *"For while there is increasing evidence that the problem of the epidemic is increasingly perceived as developmental in its origins, in that the determinants are fundamentally structural, there remains an enormous gap between a deepened perception of the problem and a commitment to effective action. … An effective response to the epidemic entails more than redefining it as a developmental problem, in that what is needed are policies for development that are themselves relevant and effective. Thus, it has been precisely the failures of development that have generated the conditions in which the HIV epidemic has thrived, and which also constrains effective responses to its deepening socio-economic impact."*
>
> Sheila Smith and Desmond Cohen in *Gender, Development and the HIV Epidemic*, UNDP, 2000

# The HIV/AIDS Epidemics of South Asia

*"It is no secret that HIV/AIDS is well spread out in South Asia. Although HIV prevalence rate is still low in the region, it is known to have one of the most rapidly growing HIV/AIDS epidemics globally. With every SAARC nation reporting infections today, HIV/AIDS has already become a regional problem".*

H.E. Mr. Q.A.M.A. Rahim, Secretary-General of SAARC at the South Asia High Level Conference 'Accelerating the Momentum in the Fight Against HIV/AIDS in South Asia', Kathmandu, Nepal, February 2003

Chapter 3

# The HIV/AIDS Epidemics of South Asia

## 3.1 Status of the Epidemic

### 3.1.1 A collage of multiple epidemics

Any analysis of the HIV/AIDS epidemics of South Asia is limited by the sparseness of epidemiological data. HIV is believed to have entered South Asia in the early to mid 1980s. By the late 1980s, it was clear that HIV transmission among various South Asian populations was escalating and with disturbing rapidity in some of them. From all obtainable data, it appears that the region is a collage of mini-epidemics displaying considerable variation in scope and intensity.

Some 700,000 new HIV infections are estimated to have occurred in South and South East Asia in 2002.[1] By the end of 2002, an estimated 6 million adults and children are living with HIV in these regions, less than half the adults being women. The South and South East Asia region accounted for an estimated 440,000 child and adult deaths due to HIV/AIDS in 2002.[2]

The earliest detection of HIV infection in South Asia was in 1986 in India. The next year, Iran, Nepal, Pakistan and Sri Lanka also reported the presence of HIV in their countries, followed by Bangladesh in 1989. Since then, nearly all the countries of the region have recorded increases in HIV prevalence.

In Afghanistan, the lack of reliable data in general—and epidemiological data in particular—precludes a realistic assessment of the HIV/AIDS situation. It is clear, however, that the many factors contributing to aggressive HIV/AIDS epidemics elsewhere are present in this country as well. Afghanistan has long been a cradle of conflict and the resultant instability has shredded the fabric of Afghan society. The presence of local and international military forces, the widespread availability of heroin and its use by young people, the vulnerable status of women and the high levels of mobility of large, displaced populations conspire to create a situation of heightened susceptibility to HIV.

Under-reporting may be the cause of the low estimates of HIV infections and AIDS from Bangladesh, Sri Lanka, Iran and elsewhere in the region. For many years, Bhutan and the Maldives remained in the ranks of countries that had not reported a single case of HIV or AIDS. Both have, however, begun to report increases in the number of HIV infections. Apart from inadequacies and difficulties in surveillance and voluntary testing and counselling, ignorance and stigmatisation obscure the true extent of HIV/AIDS in South Asia.

*"HIV/AIDS has developed under diverse conditions around the world with consequent variations in the mode of transmission and the rate of transmission. In the industrialised countries, what began as an epidemic among men who have sex with men and then needle-sharing drug users, is now increasingly concentrated in poor and marginalised sectors of the population. In Eastern Europe, HIV is spreading rapidly among intravenous drug users. In Africa and South Asia, the AIDS epidemic is almost entirely among heterosexual non-drug-users. Latin America represents a composite of the industrial and developing worlds both in its economic performance and in its HIV epidemics."*

Eileen Stillwaggon in HIV Transmission in Latin America: Comparison with Africa and policy implications, The South African Journal of Economics, December 2000

India, the most populous country in the region, accounts for the vast majority of PLWHA, not just in South Asia but the whole of Asia and the Pacific. India's low national HIV prevalence rate of less than 1 per cent translates into millions of infections in absolute numbers, given the enormous size of the population. Globally, India's HIV positive population of nearly 4 million ranks second only to that of South Africa.[3]

Though the HIV/AIDS profile of South Asia is biased towards both men and women in the 15–49 years age group, which is the prime working period and the age in which a person is sexually active, the majority of PLWHA in the region are men in this age group. To give just one example, the ratio of HIV positive men to women in Pakistan in 2000 was 7:1.[4] The fewer numbers of HIV positive women in some South Asian countries could, however, also be due to bias in sample size of the sexes. In Sri Lanka, for example, the reported HIV infections among women and men are nearly equal because the large numbers of women who form the bulk of workers travelling to the West in search of work are routinely screened for HIV. In any case, this trend of more HIV positive men than women appears to be changing. By December 2002, women accounted for 36 per cent of all new infections reported in South and South East Asia.[5] In the "older"[6] epidemics of many African countries, women account for the majority of new HIV infections.

### 3.1.2 The evolution of the epidemic

Apart from data problems, the low prevalence rate may have something to do with the fact that the HIV epidemics of South Asia are relatively young and HIV/AIDS related illnesses and deaths are only just beginning to surface. Adult HIV prevalence rates reported from South Asian countries are yet to touch 1 per cent and, therefore, the region imparts a reassuring impression of low HIV prevalence rates.

However, this 'low prevalence rate' situation may be short-lived. All HIV/AIDS affected countries – including the severely affected ones in sub-Saharan Africa—were low prevalence rate countries in the early years of their epidemics. HIV prevalence rates among pregnant women attending antenatal clinics in South Africa was less than 1 per cent in 1990. By 2001, the figure had risen to 24.8 per cent and the country is now in the grip of a fast-growing HIV epidemic.

The urgency of launching preventive programmes is the other (albeit unintended) factor perpetuating a behavioural explanation for high levels of HIV/AIDS in Africa. The use of condoms can directly prevent cases of HIV transmission. Consequently, the provision of condoms becomes the most immediate short-term programme for HIV/AIDS prevention. Often prevention essentially stops there, given the expense of any prevention programme, the complexities of dealing with host governments with differing political agendas and the seeming enormity of resolving the more fundamental causes of HIV/AIDS. HIV/AIDS, like other infectious diseases, is the result of all the complex and interrelated factors that exist in poor countries. Leaving prevention essentially to condom provision (and treatment of STIs) reinforces the notion that HIV transmission is narrowly the result of levels of sexual activity and fails to address other determinants, such as general health, the effects of poverty, and gender relations.

The 'low prevalence rate' label is also deceptive as it obscures the reality of sub-

epidemics of greater degree among sizeable segments of the populations.[7] For example, though India's HIV prevalence rate among adults is reported to be 0.8 per cent, the states of Maharashtra, Andhra Pradesh and Tamil Nadu have reported prevalence rates of over 1 per cent among pregnant women coming to antenatal clinics, a statistic considered indicative of its spread into the general population.[8]

Thus, even within this overall low prevalence rate setting, many South Asian countries have both concentrated and generalised epidemics in respective situations of high risk such as injecting drug use, commercial sex and sex between men. The prevalence rate among female sex workers in Nepal also increased from less than 2 per cent in 1990 to current rate of 20 per cent.[9] However, the epidemic is not restricted to these groups, and expectant mothers and children are now increasingly vulnerable. Indeed, MTCT rates are on the upswing across the region.

It is virtually impossible to predict precisely how the HIV epidemics of South Asia could expand and intensify. Generalised epidemics have been reported from six Indian states and several districts in these states have prevalence rates of more than 5 per cent. This shows that the epidemic can emerge quickly and unexpectedly.

Although the epidemics in individual South Asian countries are varied and growing at different rates, it is clear that the factors playing a key role in determining their course are similar. These are:

- the magnitude of people in risk situations;
- the frequency and numbers of unprotected risk behaviours such as sex without condoms or sharing of injecting equipment;
- the extent of networking among the sex and injecting drug use circuits, and the size of bridge populations that share risk behaviours with these circuits and the general population; and
- the reach and effectiveness of protective responses by governments and civil society.

In India, the virus was found predominantly among sex workers and injecting drug users in the early years. It then started spreading into segments of society not recognised as being at risk such as wives who were monogamous but whose spouses had contracted the virus from sex workers or other sex partners belonging to the bridge populations. It is argued that what makes married women vulnerable is basically their inability to negotiate safer sex, a problem that is part of the generalised lack of control over their sexual and reproductive decisions, which

**Box 3.1** **Afghanistan: blood transfusion, injecting drug use are suspected transmission means**

Afghan and international health authorities are beginning a study of the prevalence of HIV/AIDS in Afghanistan and how best to control it.

A 9 June 2002 press release from the World Health Organization (WHO) says that little is known about the occurrence of the disease in Afghanistan. The country's recent turbulent history makes it vulnerable to HIV/AIDS transmission. Other countries that have been caught up in conflict or have a high number of refugees and displaced persons have experienced rapidly spreading outbreaks of HIV/AIDS. Because of the country's seriously damaged healthcare system, improper blood transfusion may prove to be a likely route of transmission. WHO reports that testing blood supplies for HIV is not a standard course in Afghan surgical procedures. Besides, Afghanistan is among the world's largest producers of opium poppies from which heroin, that is usually injected, is derived.

*Source:* Office of International Information Programs, U.S Department of State
(http//usinfo.state.gov)

**Box 3.2**

### African AIDS is not a special case

An unfortunate intersection of Western notions of Africans and the need to address the spread of HIV as directly and quickly as possible has created the impression that African AIDS is a special case. Western stereotypes of African sexuality are reproduced in academic literature with a much lower standard of evidence than would be required of other academic work. Several works on the spread of AIDS in Africa assert high levels of partner change without providing data to support their hypotheses. Those assumptions are then treated as established fact and become the scholarly foundation for a behaviour-based AIDS policy.

In fact, such misconceptions had initially lulled policy makers in South Asia into a false sense of security regarding the magnitude of the epidemic. It had been argued that the epidemic in the region is self-limiting, given the differences in behaviour patterns in comparison with other regions.

The data that does exist leads to quite the contrary conclusion. UNAIDS data show remarkable similarity in reported rates of partner change among countries with very different HIV prevalence rates. For example, in both the United Kingdom (HIV rate, 0.09 per cent) and Zambia (HIV rate, 19.07 per cent), 27 per cent of men reported having a non-regular sex partner. Similarly, Switzerland (HIV rate, 0.32 per cent) and Ivory Coast (HIV rate, 10.06 per cent) reported virtually identical proportions of men and women with non-regular sex partners.[10]

The urgency of launching preventive programmes is the other (albeit unintended) factor perpetuating a behavioural explanation for high levels of AIDS in Africa. The use of condoms can directly prevent cases of HIV transmission. Consequently, the provision of condoms becomes the most immediate short-term programme for AIDS prevention. Often prevention essentially stops there, given the expense of any prevention programme, the complexities of dealing with host governments with differing political agendas and the seeming enormity of resolving the more fundamental causes of AIDS. AIDS, like other infectious diseases, is the result of all the complex and interrelated factors that exist in poor countries. Leaving prevention essentially to condom provision (and treatment of STIs) reinforces the notion that HIV transmission is narrowly the result of levels of sexual activity and fails to address other determinants, such as general health, the effects of poverty, and gender relations.

*Source:* Stillwaggon, 2000

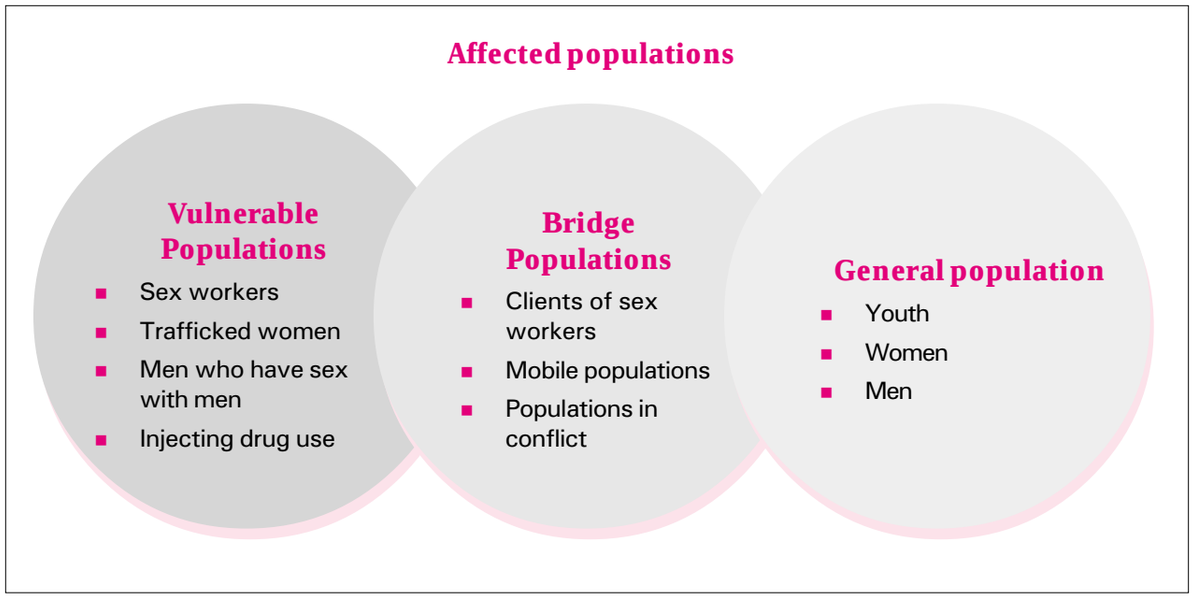
is also reflected in other indicators of patriarchy, such as high fertility rates.

### 3.1.3 Shared vulnerabilities, shared realities

In South Asia, vulnerability to HIV is a 'shared reality'. Hundreds of refugees and mobile populations in search of livelihoods who move within and between Afghanistan, Bangladesh, Nepal, Pakistan, Bhutan and Sri Lanka are exposed to situations that increase their vulnerability to HIV/AIDS.

#### Unsafe blood transfusions and injections

According to a WHO estimate, more than 50 per cent of blood transfusions in the region were not screened for HIV in 1995. Mandatory HIV screening of blood has yet to establish itself in many countries in the region, despite the enormous volume of blood transfusions. Bangladesh, which transfuses close to 200,000 units of blood each year, does not screen for HIV, according to the provisional report of the Monitoring of AIDS Pandemic (MAP) Network Symposium, 1997. In Pakistan, an estimated 40 per cent of about 1.5 million annual blood transfusions elude HIV screening.[11] Maldives has the highest incidence in the world of Thalassaemia minor. This hereditary blood disorder requires frequent blood transfusions, rendering the country vulnerable to HIV if blood is not tested for HIV. However, there are examples of positive State action on this issue, such




as the improvement in the blood safety programme and quality of blood banking services in India (see Box 3.3).

Injections are a popular method of medical treatment in South Asia and are often given or demanded even when not necessary. Studies show that Pakistan has a high annual ratio of 4.5 injections per capita and used injecting equipment is re-used for 94 per cent of the injections. According to WHO estimates, unsafe injections account for 62 per cent of cases of Hepatitis B, 84 per cent of Hepatitis C, and 3 per cent of new HIV cases.[12]

### Injecting drug users

HIV infection is common among injecting drug users since the sharing of needles rapidly spreads the infection. Injecting drug use followed the introduction of heroin and has expanded significantly in South Asia since the 1990s. It is replacing traditional modes of drug intake such as smoking. The shift from traditional drugs such as opium to life-endangering drugs such as heroin and brown sugar and further to pharmaceutical drugs is linked with the legal, social and economic developments in the last few decades. The fall in the availability and quality of drugs and rise in prices are among the factors that have led to increasing levels of injecting drug use. To date, the most serious co-existence of injecting drug use and HIV-positive people is seen in the states of northeastern India, notably Manipur (See Box 3.4).

**Box 3.3** **India addresses the problem of unsafe blood transfusions**

The Drug and Cosmetics Acts/ Rules of India (3rd Amendment), 2002, makes the universal screening of blood units for five transmissible infections – HIV, Hepatitis B, Hepatitis C, syphilis and malaria – mandatory. The rules also stipulate that blood banks can be set up only after obtaining a license from the competent authority and this license has to be renewed at regular intervals. In 2002, the Government of India also approved a National Blood Policy, which aims at ensuring easy accessibility and adequate supply of safe and quality blood and blood components collected from well-informed and non-remunerated regular blood donors in well-equipped premises. National AIDS Control Organisation (NACO) has also developed a comprehensive Action Plan-2002 for nation-wide implementation of the strategies laid down in the National Blood Policy in a phased but time-bound manner.

**Box 3.4 The rapid spread to the general population**

An example of the spread of HIV from a concentrated epidemic in an especially vulnerable group to the general population may be found in Manipur, a northeastern state in India. The HIV prevalence rate among injecting drug users in the state rose from undetectable levels in 1988 to an overwhelming 70 per cent in four years. HIV subsequently spread through the sexual route to the wives and sex partners of injecting drug users and by 1999, HIV prevalence rate among pregnant women in Manipur reached 2.2 per cent.

*Source:* UNAIDS 2000a

Numerous drug users began using injections as heroin became more available from fields in Afghanistan and trade networks in that country and Pakistan. In eastern India and Bangladesh, drug trade with Myanmar contributed to increases in injecting drug use. There are an estimated 60,000 to 100,000 injecting drug users (IDUs) in Pakistan, 20,000 to 25,000 in Bangladesh, 98,000 to 118,000 in India and nearly 300,000 in Iran.[13] In the Maldives, too, rising drug use among youth is a cause for concern. The Maldives Human Development Report, 2000, says that the islands reported a 40-fold increase in drug use between 1977 and 1995.

Injecting drug use does not seem to be a factor in Bhutan and Sri Lanka, and only a minor factor in Bangladesh. Though there is limited evidence about HIV infection among injecting drug users in Bangladesh, the potential certainly exists as needle sharing among injecting drug users is at a very high rate of up to 97 per cent.[14] In central Bangladesh, needle sharing was found to be a routine matter among 93.4 per cent of over 500 injecting drug users. These drug injectors are not insulated from the general population—they are often married and are sometimes commercial sex workers or professional blood sellers.[15]

In Pakistan, an initial study[16] of injecting drug users found no cases of HIV infection. However, it was found that 63.3 per cent shared needles and half of them were sexually active. Among the latter group, 49.5 per cent had sex with commercial sex workers.[17]

Iran also has a major drug problem that has led some authorities to suggest that the number of HIV infections is greater than available data indicate. In fact, the majority of HIV infections have been detected among injecting drug users. An Islamic Republic News Agency (IRNA) report, "*More than 3000 people affected by AIDS*" quotes recent estimates that suggest that some 300,000 people inject drugs. Besides, prisons pose a high risk environment for the spread of HIV because of the sharing of smuggled injecting equipment. Rates of HIV infection rose from 1.37 per cent in 1999 to 2.28 per cent in 2000.

### Sex workers

In South Asia, the magnitude of men and women offering, or forced to offer, sexual services for payment or other forms of benefit is unknown. Besides sex workers themselves, there are a large number of people who make an indirect living from the sex trade. It should be noted that estimating numbers is difficult because of the covert manner in which the trade takes place. In Nepal, for example, there are no identifiable red light areas and sex workers often shift their operations upon discovery, which leads to their persecution by society and the police.[18]

Street children are also vulnerable. Enforcement of existing international agreements and national laws has been lax, in part because of the perception that many of the children drawn into the sex trade are willing participants or belong to socially marginal groups.[19]

**Box 3.5**

### HIV/AIDS vulnerability amongst Afghan drug users

In order to assess the vulnerability to HIV among the drug users of Afghan origin living in the Pakistani town of Quetta, an NGO, Nai Zindagi, conducted a research study in May 2002 in collaboration with UNDP. The focus of the study was on the prevalence of risky behaviour among this group that may lead to them getting infected with HIV and other blood-borne diseases.

Of the 152 Afghan drug users selected for interview on a random basis, 15 per cent were those who had come to Pakistan during eight months preceding the study, as a result of the war-like situation in Afghanistan. A majority of the respondents were living on streets at night, and were financing their drug purchases through begging, theft, selling of junk or casual work. Although, 32.2 per cent of the respondents had injected drugs at some point in time, only 15 per cent said that they were injecting drugs at the time of the interview. However, the trend of injecting drugs is on the rise among this group and needs to be addressed immediately as 76 per cent of the injecting drug users were sharing syringes.

A majority of respondents said that their immediate priority was getting treatment for use of drugs. However, since most of them were using drugs for a very long period, the chronic stage of their drug use behaviour suggests a substantially long-term drug treatment programme to make them drug free.

Sexual activity with commercial sex workers, street children and men who have sex with men is prevalent among Afghan drug users. Very low ratio of condom use, and lack of knowledge about safety measures exposes them to all kind of STIs, including HIV/AIDS.

What is of concern is that more than 50 per cent of the respondents had never heard about AIDS. Even among the 23 per cent respondents who claimed that they know how HIV/AIDS is prevented, the majority had no answer when asked to list the different methods of prevention.

*Source:* Nai Zindagi 'Study to assess HIV/AIDS vulnerability both through sexual patterns and injecting drug use among the drug users of Afghan origin in Quetta', May 2002

The notion that young girls are less likely to be infected with HIV than women who are more experienced sexually has increased the recruitment of minor girls into the sex trade. A 1998 International Labour Organization (ILO) study estimated that there were 30,000 children who are sexually exploited in Sri Lanka.[20] Male child sex workers—also referred to as `beach boys' because they operate in the coastal resort areas patronised, in particular, by European nationals-figure in travel advertisements.

## Men who have sex with men (MSM)

Sex between men is not uncommon in South Asian societies.[21] Studies such as those carried out by the NAZ Foundation, a New Delhi-based NGO, highlight the widespread occurrence of such sexual practices in India, Bangladesh, Pakistan and Sri Lanka.

HIV prevention efforts among men who have sex with men have focused on providing information on safer sex, in the hope that an awareness of the risk of HIV would enable them to choose safer options. Bandhu, a community-based organisation in Bangladesh, carried prevention information to the general population through public campaigns and to MSM populations through peer educators. These efforts were supplemented with the provision of STI diagnoses and treatment, condoms and lubricants. Studies from India and Bangladesh show that while the availability of increased information certainly leads to greater awareness among MSM, it has not necessarily resulted in safer behaviour. The failure to effect behaviour change has been attributed to poverty and the lack of skills to negotiate safer sex, as well as sexual abuse, stigmatisation and the criminalisation of homosexual behaviours.

Table 3.1

**Drug use and HIV infections in South Asia**

| Country | Number of Injecting Drug Users (IDUs) | HIV prevalence rates among IDUs (%) |
|---|---|---|
| **Afghanistan** | N.A. | N.A. |
| **Bangladesh** | 20,000–25,000 | 1.7 |
| **Bhutan** | N.A. | N.A. |
| **India** | 98,000–118,000 | N.A. |
| **Iran (I.R.)** | 200,000 to 300,000 | 75 |
| **Maldives** | N.A. | N.A. |
| **Nepal** | 20,000 | 2% in 1990 exceeded 50% in 1999 |
| **Pakistan** | 60,000–100,000 | 11 |
| **Sri Lanka** | 600 | No reported cases |

*Note:* N.A. indicates not available
*Sources:* Data on Bangladesh: World Bank, 2002a and Reid and Costigan, 2002; Data on Iran: Reid and Costigan 2002; Data on Nepal: World Bank 2002a; Data on Pakistan: World Bank 2002a; Data on Sri Lanka: World Bank 2002b

Governmental policies for HIV prevention are often at odds with the penal laws. For instance, homosexual behaviour is a cognizable offence in South Asian countries such as India. At the same time, governmental AIDS programmes are committed to protect the rights and dignity of people living with HIV, irrespective of their sexual orientation. These conflicting governmental policies and programmes detract from the effective utilisation of HIV preventive services by men who have sex with men who fear exposure and subsequent legal persecution.

**Box 3.6** **Trafficking of women is a serious problem in South Asia**

- *Bangladesh*: In 1994, 2,000 women were trafficked to six cities in India. An estimated 200,000 women have been trafficked to Pakistan over the past 10 years, and the trafficking continues at the rate of 200 to 400 women each month.
- *India*: Of the 2 million women in sex work in India, 25–30 per cent are minors. It is estimated that there are more than 1,000 'red light areas' all over the country.
- *Nepal*: 5,000–10,000 girls and women are trafficked into India every year.

*Source:* CATW, 2002

## Youth sexuality

A related problem is the denial of youth sexuality and of their reproductive health needs. A large number of young people also form part of mobile populations, with associated vulnerabilities. A recent survey in Bangladesh showed that adolescents in both rural and urban settings had limited knowledge of STIs/Reproductive Tract Infections (RTIs). Urban youth were somewhat more aware, though not necessarily better informed, than their rural counterparts, a good understanding of STI and HIV was limited.[22] The government and a small number of NGOs have begun an information, education, communication (IEC) programme to inform adolescents about STI and have begun to improve reproductive health services for the youth. In India, some pilot curricula for 'life skills' education, which includes sex education, have begun. However, across South Asia there is a widespread view among influential

groups (teachers, parents, spiritual leaders, some politicians) that sex education for young people only contributes to the early onset of sexual relations.

India's reproductive health policies, while using the latest jargon and concepts, are still influenced by traditional attitudes and mindsets. The reason often given by government authorities for not addressing adolescent sexuality and sexual health needs is that these issues are not relevant as young people are not sexually active.[23]

In Iran, social and policy changes have affected youth (including adolescent) sexual health, although no aspect of national policy explicitly speaks about sexual health. Both young men and women are marrying later than in previous decades, in part because of continuing formal education, in part because of economic constraints, and in part because of national policy raising the permitted age of marriage.[24] Couples who register to marry are required to undergo medical tests for STIs. Premarital sexual relations and pregnancy among adolescents (particularly among unmarried girls) are strictly censured and subject to severe punishment.

Sri Lanka, like India, has adopted a Population and Reproductive Health policy. However, the Sri Lankan policy has specific provisions about adolescents. The strategies include the following:

- providing adequate information on population, family life including ethical human behavior, sexuality, and drug abuse in school curricula at the appropriate levels;
- strengthening youth-worker education by including information about drug abuse and sex-related problems at vocational training centres, institutions of higher learning, work places, and free trade zones;
- encouraging counselling on drug and substance abuse, human sexuality, and psychosocial problems, especially by NGOs, CBOs, and the National Youth Services Council;
- promoting informed constructive media coverage of youth-related social problems; and
- promoting productive employment opportunities for youth.

The country has moved ahead with implementing the policy and related strategies. An interesting objective within the programme is to contribute to creating a socio-political and value climate, clearly an activity within which policy makers and influential authorities will play a role, especially with parents and conservative elements in society.[25]

Many Nepalese adolescents are aware of HIV/AIDS and the means of transmission and prevention, indicating active campaigns to reach youth and adults with basic messages. Young people in Nepal are, in general, sexually active in their teenage years, according to survey findings. However, without extensive health services targeted towards adolescents, to complement awareness and information, the vulnerability to HIV could be significant.[26]

*Mobility and migration is often a survival imperative in South Asia, as abject poverty and lack of employment opportunities at home compel people to migrate.*

## Migrant and mobile populations

Mobility and migration is often a survival imperative in South Asia, as abject poverty and lack of employment opportunities at home compel people to migrate. Although there has been little research on the impact of intra-and inter-country migration on the spread of HIV, and it would be wrong to label migrant and mobile populations as being a source of infection, the fact remains that this group is vulnerable to HIV. The link between

HIV and mobility is shown by the rise in HIV incidence in remote areas of Nepal whose contacts with the outside world are confined to people who frequently migrate for work to cities like Mumbai and Delhi in India.[27]

HIV prevention efforts focusing exclusively or extensively on especially vulnerable people might worsen the stigmatisation of some groups. Vulnerable and bridge populations such as sex workers, migrant workers and long distance truckers struggle to survive within a hostile social structure that shapes their behaviour and that of the authorities who interact with them. Sex workers might require a large number of clients to earn a livelihood and do not have the ability to negotiate safer sex and better payment. For mobile populations, long absences from the home environment, housing in single-sex hostels, lack of access to STI treatment, the use of alcohol or drugs in order to 'belong' to the peer group and harassment or indifference from service providers are all factors over which they have no control. The prevention approaches of many HIV programmes in South Asia assume that raising awareness about HIV and providing condoms or clean needles will enable people to switch to safer behaviours. Given the situational nature of risk, however, it is clear that people are more likely to adopt–and sustain–safer behaviours when the underlying risk situation is simultaneously made safer. This is especially true wherever individuals are powerless to protect themselves, despite being aware about HIV/AIDS.

The challenge, then, is to bring about societal changes to reduce HIV risk among highly vulnerable populations and lessen the social stigma surrounding them. This entails the inculcation of caring social attitudes, improving the availability, accessibility and sensitivity of HIV services and introducing legal and regulatory measures that can protect these groups. Vulnerable groups may then feel encouraged to avail of healthcare services and support mechanisms offered by governments and NGOs. The usage of non-judgmental language in expanded media coverage of the epidemic, for instance, can help transform negative attitudes to people in risk situations.

## 3.2 Conflict and Development in South Asia

*In a scenario of fiscal constraints and often misplaced spending priorities, the notion of guaranteeing human security can be an effective way of placing the concerns of poverty eradication, universal literacy and health for all at the forefront of South Asia's public agenda.*

Human security, a concept that combines peace and development, is gaining relevance in the policy agendas of South Asia due to its critical role in building human capabilities. The links between human security and development are increasingly being felt in the area of health and are acquiring pre-eminence in research.[28] In a scenario of fiscal constraints and often misplaced spending priorities, the notion of guaranteeing human security can be an effective way of placing the concerns of poverty eradication, universal literacy and health for all at the forefront of South Asia's public agenda.

Human security presumes freedom from want and from fear, as well as access to and control of resources and opportunities. The basic elements of human security include survival, safety, opportunity, dignity, agency and autonomy. These preconditions for human security are essential in reducing vulnerability to HIV infection and to its impact.

The underlying causes of internal conflicts have seldom been addressed. The most contentious issues revolve around ethnic status, religion, language, demarcation of land, distribution of assets, and the absence of meaningful

**Box 3.7**

### How do perceptions and language reinforce HIV-related misconceptions and stigma?

- **High risk groups**: Can further marginalise people in certain vulnerable situations and create a false sense of security in the general population.
- **Promiscuous behaviour**: A derogatory term that makes a value judgement about people's behaviour.
- **Drug abusers**: The use of this term implies that drug users deliberately misuse drugs and this increases the blame associated with drug use.
- **Prostitutes and drug-addicts**: Judgmental terms with traditionally negative connotations that label certain vulnerable populations.
- **Powerless victims**: Reduces people subjected to traumatic experiences like rape or trafficking to passive individuals who cannot change the course of their lives.
- **HIV patients**: Does not recognise that people with HIV can lead normal, healthy lives.
- **Targeted interventions**: An exclusionary term that sees people as `others' and thus discourages their participation in and feeling of ownership of HIV prevention and care.
- **The killer disease:** A fear-based message which has not only been proven ineffective but also made families and communities fear normal social relations with people living with HIV/AIDS.

employment. The unequal distribution of wealth and imbalances in regional growth have routinely fuelled discontent. "When times are hard, the sense of injustice is often borne along ethnic, religious, and caste lines. Violence thrives in poor societies where politics is weakly institutionalised, law and order is fragile, and where the parallel economy is strong. South Asia, at least for the moment, fits the bill perfectly."[29]

In the South Asian context, the potential of conflict to disrupt development and violate human rights needs to be closely monitored to enable pre-emptive countermeasures. Conflict may also be viewed as an aggravated form of social tension, which clouds constructive thinking and prevents people from the full enjoyment of their human right to a long, healthy and productive life. Conflict and violence in South Asia are often viewed as law and order problems and their development implications are usually neglected.[30] UN documents view conflict as a violent physical and social confrontation between inter-state or intra-state entities, inhibiting people from the full enjoyment of their human rights in terms of the UN International Covenant on Economic, Social and Cultural Rights (1966).

Conflict has become a crucial development concern in South Asia today. The region is torn by both inter-state as well as intra-state conflicts. Intra-state conflicts, which are larger in number, are socially divisive and undermine the integrity of the nation states leading to a vicious cycle of violence and social disintegration. Warring factions resort to looting, drug trafficking, arms smuggling, plundering of the environment and other international crimes. Much of this escapes notice in literature on development.

The South Asian countries have large populations living in or fleeing from conflict situations. The situation is causing concern to the affected countries, their neighbours and humanitarian aid

**Box 3.8** **Conflict impedes HIV prevention**

Even where HIV prevention work is underway, it can be easily disrupted by conflict. Efforts to raise awareness about HIV/AIDS in Nepal's Achham district have been hindered by fighting between Maoist rebels and government forces. The programme had managed to reduce HIV-related stigma in the district by enlisting volunteers. In September 2001, the programme had 856 volunteers, half of them children. Since February 2002, most of the district has been under Maoist control. All NGO offices have been burnt down; infrastructure and government offices have been destroyed. NGO workers and volunteers are afraid to work, and the programme's impact is under threat. As a strong community-based programme with little input from outside, it is hoped that programme will survive amid conflict. The people of Achham district are determined that the programme will carry on as best it can.[31]

HIV prevention efforts among refugees is also fraught with difficulty. In the early 1990s Afghan rebels had reportedly terrorised women in refugee camps in Pakistan and forced them to abandon training and education courses.[32]

organisations. Any form of civil conflict that results in the displacement of people will fuel the epidemic.

### 3.2.1 Sources of conflict

Conflict in South Asia is aggravated by a variety of factors such as ambitious projects of 'nation-building', the failure of representative democracies and inadequate governance. The latter half of the twentieth century has witnessed the parallel emergence of sectarian and fundamentalist ideologies and globalisation, which have been accompanied by the wide dispersal of arms and narcotics, the progressive militarisation of the establishment and of subversive groups, and increased military spending. At the same time, natural resources have been grossly depleted and certain development interventions have led to communities being displaced from their natural habitats. Large parts of the region, which today consist of independent nation-states, were once part of one colonial empire. Besides, the political, ecological, social and human security implications of conflicts in one country are carried over into neighbouring countries, a ready example being the movement of huge numbers of Afghan refugees across the frontiers into Iran and Pakistan.

The region is an ethnic and cultural mosaic characterised by the traditionally close interaction of indigenous communities, castes, races and religions. Porous borders enable the movement of people across frontiers, facilitating not only cultural and social contact but also the movement of drugs, arms, money and insurgent groups. These have a bearing on internal developments in the adjoining countries.

In development terms, wide-ranging material and psychological deprivations are associated with conflict, including entitlement failures, health crises, physical violence and forced displacements. Conflict also disrupts development prospects by destroying the productive infrastructure, public services, settlement patterns, environmental resources, social capital and the institutions of governance.[33] Given the enormity of the task of providing food supplies, shelter and basic medicines to an ever-growing refugee population, there is need for the mobilisation of resources on an unprecedented scale.

Competing demands on limited public revenues in South Asia result in influential groups accessing a larger share of resources. Besides, non-merit subsidies, making for losses of public sector corporations and external defence also absorb a significant portion of resources. With the notable exception of Maldives, social sector expenditures in South Asia remain low at less then 5 per cent of GDP. Endemic deprivation that becomes the

Table 3.2

**Persons of concern to UNHCR in South Asia**

| Name of country | Main origin/Type of population | Total in country |
|---|---|---|
| Afghanistan | Afghanistan Internally displaced persons (IDPs) | 1,200,000 |
| | Returnees from Iran | 18,000 |
| | Returnees from Pakistan | 8,000 |
| Bangladesh | Myanmar (Refugees) | 21,000 |
| Bhutan | N.A. | N.A. |
| India | Tibet | 110,000 |
| | Sri Lanka | 110,000 |
| | Myanmar | 42,000 |
| | Bhutan | 15,000 |
| | Afghanistan | 19,000 |
| | Other countries | 1,000 |
| Iran (I.R.) | Afghanistan (Refugees)(Note: According to the government, the number of Afghans is estimated to be 2.3 million) | 1,482,000 |
| | Iraq refugees | 386,000 |
| Maldives | N.A. | N.A. |
| Nepal | Returnees (from Bhutan) | 110,800 |
| | Tibetans (Refugees) | 20,100 |
| Pakistan | Afghanistan (Refugees) (Note: According to the government., the number of Afghans is estimated to be 3.3 million) | 2,198, 800 |
| Sri Lanka | Sri Lanka (IDPs) | 683,300 |

*Note:* N.A. indicates not available
*Sources:* UNHCR, 2001; SAHRDC, 2001

breeding ground for crime and violence in South Asian societies are resulting in their further polarisation.

### 3.2.2 The gendered impact of conflict: violence, sexual coercion and vulnerability to HIV

Besides threatening all aspects of human security, war and conflict greatly increase vulnerability to HIV for all involved, particularly for women and girls often through systematic rape and other war crimes. Girls and boys are especially vulnerable to abuse and exploitation both as civilians and as child soldiers. The powerlessness of women and girls to negotiate safety in their sexual and social relations is a key issue for HIV prevention.

Studies have found that the vulnerability of women to HIV gets heightened in conflict situations in South Asia. The Beijing Platform For Action (PFA), 1995, states that in armed conflicts "women and girls are particularly affected because of their status in society and their sex". The result of such conflicts are devastating, ranging from brutal killings of children, women and elderly, disabling others and, in addition, increasing the vulnerability of children to malnutrition, illness and death. Further, they worsen all the health indices negatively due to inadequate nutrition,

**Box 3.9**

## Factors contributing to the spread of HIV in conflict situations

- **Sexual violence:** In refugee camps and other settlements with displaced people, women and girls risk the loss of personal security in the course of their daily duties such as collecting firewood or water.
- **Breakdown in social structures and legal protection:** Sexual relationships become more transitory and may involve a greater number of partners. Young people become sexually active and marry at a much earlier age in the absence of leisure, education and employment opportunities. In such circumstances women and young girls are often sexually abused and not protected from sexual violence
- **Health infrastructure:** The impairment or destruction of health infrastructure means that blood may be transfused without proper screening, access to condoms is limited, STIs are not treated and drugs are not available to prevent mother-to-child transmission. Also, trained staff and confidentiality are hard to find as are care and support for HIV positive persons. This is especially true of temporary healthcare facilities, Moreover, soldiers and members of uniformed services are more likely to receive healthcare and treatment than their families. Women and girls have especially limited access to health facilities and face more public discrimination because of the absence of medical and social support.
- **Gender inequity:** The ability of women and girls to negotiate safer sex or abstinence becomes even more limited during times of insecurity and strife, rendering them even more vulnerable than in normal times to sexual and gender-based violence, discrimination and HIV infection.
- **Basic needs and economic opportunities:** Women and children sometimes exchange sex for food, resources shelter, protection and money. Thus, in the absence of human security, refugee clusters can become sites of sex work.
- **Education and skills training:** More women and girls engage in risky behaviours because a lack of education and skills training leaves them with few options and income-generating opportunities.
- **Displacement:** During armed conflict, large populations are often displaced, while healthcare services are disrupted, closed or become unreachable. Most social services such as schools and health education also shut down, leaving communities bereft of the very institutions that form the core of social cohesion and interaction. Moreover, people from different regions and backgrounds are thrown together leading to adjustment problems, personal security deteriorates while sexual and gender violence becomes more frequent as social norms and patterns are put under strain, even dissolved, by the desperate situation that people face. When the conflict ends or slows, both civilians and combatants return to their home communities, sometimes carrying the virus.

*Source*: UNFPA, 2000

unsafe drinking water and inadequate maternal and child healthcare.

Violence against women contributes directly and indirectly to women's vulnerability to HIV and their ability to cope with it. In population-based studies world wide, 10 per cent to more than 50 per cent of women report physical assault by an intimate partner. Physical violence, the threat of violence, and the fear of abandonment act as significant barriers for women in negotiating the use of a condom, discussing fidelity with their partners, or leaving relationships that they perceive to be unsafe. Those who are especially vulnerable to violence are women known or suspected to be HIV positive, young women and girls, sex workers, trafficked women, street children and orphans whose parents have died of an AIDS-related illness.

Women play several roles in armed conflict situations: as armed activists, as relatives of armed activists, as relatives of state armed forces, as shelter providers,

as victims of sexual and physical abuse and as peace-builders.[34] While the powerlessness of women in conflict situations is to be emphasised, their ability to cope with adverse situations should also be highlighted. Often, the formation of self-help groups, supportive counselling groups and other training allow women avenues to negotiate safety in their relationships. These vectors of change need to be considered while addressing issues of violence, gender inequalities, trafficking and HIV/AIDS.[35]

Throughout South Asia, men, women, boys and girls are trafficked within their own countries and across international borders in a clandestine trade. Conflict situations are found to aggravate the underlying factors leading to trafficking, including the heightening of existing socio-economic disparities, class and gender bias, lack of transparency in regulations governing labour migration and poor enforcement of human rights standards.[36]

In the conflict-affected areas in South Asia, many issues arise in relation to women affected by armed conflict. These include the lack of protection of reproductive and sexual health rights of refugee and displaced women; the non-representation of women in conflict resolution activities; and the failure of state and non-state actors to adhere to humanitarian norms in regard to the treatment of women and children in conflict. However, some post facto measures for women affected by conflict are in evidence. In Pakistan, a pilot project, Women in Crisis Home, coordinates inputs for women affected by conflict. In Bangladesh, a project for poor women who suffered due to the unrest in the Chittagong Hill tracts was developed. In India, financial compensation for war widows was offered. In Sri Lanka, women have been participating in conflict resolution activities.[37]

**Box 3.10**

## The Indian Army addresses HIV

Ten years ago, soldiers with HIV had to contend with discriminatory treatment from their colleagues and superiors. Although they were not always dismissed, the results of their test were frequently openly displayed.

Today there is considerably more understanding about the nature of HIV infection and sensitivity about issues of confidentiality, and regular awareness programmes have been instituted. Voluntary Counselling and Testing Centres are being opened, an AIDS education programme has been instituted in 200 Armed Forces schools and the military system of blood banks is being modernised. Funding for these activities comes from NACO, with a budget in 2001 of over Rs 15 million ($ 306,000).

In conjunction with these activities, commanding officers are expected to be aware of, and respond to, any personal problems that a soldier might have, as a means of heading off potential high-risk behaviour. Furthermore, regular Sainik Sammelans (soldiers' conclaves) are planned to get Commanding Officers (COs) of units to talk with soldiers freely about HIV, while the CO's wife reaches out to the wives of the soldiers. However, such discussions are not always open and frank. Officers say that if they talk about sex with the soldiers they lose the authority to enforce strict discipline. On the soldiers' part, there is a lot of hesitation on their part to ask questions freely. "It's like a class-room lecture. You can just sit there and listen." Partly as a result of the broader prevention programme in the 1.1 million-strong Army, the number of soldiers living with HIV remains low. The most recent figures (1999) show 1,400 army personnel have contracted the virus, with a far smaller number in the Navy and the Air Force. Soldiers discovered to be HIV-positive are not dismissed, but are given easier work.

*Source:* Extract from Healthlink Worldwide, 2002

**Box 3.11**

### Sex education for Sri Lankan soldiers

The Institute for Development of Community Strengths (INDECOS) contacted senior officers in the Sri Lankan army to seek their approval and co-operation to conduct sex education programmes among their soldiers. The officers were supportive and, wherever necessary, organised leave for the soldiers. They also provided the venue and meals.

One-and-a-half day programmes were conducted with groups of 30 to 40 participants from both sexes ranging from new recruits to senior officers. The methodology used included group work, discussions, and role-play, a practical session on condom use and group presentations rather than lectures. Communication techniques were taught to encourage participants to inform friends and family about sexual health issues. Soldiers were also asked to contribute experiences of STIs and HIV/AIDS; these were compiled into a book of case studies. The soldiers who shared their experiences were ensured anonymity.

Around 900 soldiers attended the programmes. They were each encouraged to speak to approximately five others. A syllabus was created to be shared with other NGOs. After the completion of the programme, requests have been made to continue to educate new recruits.

During the course of the programme, it became apparent that soldiers had little knowledge of sexual health issues. However, they were very keen on learning and suggested more topics, such as family planning.

The 'communication' sessions–teaching participants to pass on information they learned–were an integral part of the programme. It was also found important to involve senior officers so they could understand the principles and integrate concepts into their regiments. Any problems or feelings of discomfort caused by discussing sexual issues was overcome by allowing participants to work in small groups and encouraging them to introduce their own ideas and to ask questions.

On subsequent visits to the army camps, soldiers were found to be carrying condoms, signifying their understanding and willingness to protect themselves from STIs and HIV.

*Source:* Extract from UNAIDS, 2000c

### 3.2.3 Armed forces in conflict situations and their vulnerability

Without strengthened HIV prevention efforts, the presence of international peacekeeping forces and other mobile personnel in post-conflict settings may provide a focus for a new local epidemic. The impact of peacekeeping operations on the HIV/AIDS epidemic is of such concern that in July 2000 the UN Security Council addressed the issue and adopted resolution 1308 with special recommendations for states on prevention measures to be taken. In Bangladesh, authorities believe that the HIV/AIDS education programmes organised by the Army prior to overseas deployment were successful in alerting the personnel to the vital need to avoid behaviours that put people at risk.[38]

Boxes 3.10 and 3.11 illustrate the South Asian success stories in addressing HIV among soldiers, through a compassionate and caring approach, as distinct from one of discipline and punishment.

## 3.3 Current Response to HIV/AIDS in South Asia

There is frequent debate about whether the HIV response should be focused especially on vulnerable groups in the hope of containing the epidemic at an early stage, or whether all citizens must be involved early on to reduce the potential for rapid spread of the epidemic. The issue here, however, is that of scale rather than focus, considering that both approaches entail the delivery of HIV preventive information and services, the active inclusion of

stigmatised people and an honest discussion of issues pertaining to socially stigmatised behaviours. Governments must intelligently apportion scarce resources and efforts between the especially vulnerable groups and the general population because the reality is that HIV prevention must be available to everybody regardless of their degree of vulnerability. The extent and intensity of such efforts, however, must be judiciously tailored to each group's scale of need.

The stigmatisation of people living with HIV may hasten the spread of the virus due to denial of medical attention or the unavailability or unaffordability of treatment. Social stigma can also increase vulnerability to HIV by deterring people at risk from accessing education, information, counseling and testing.

With support from the WHO, UNAIDS, World Bank, UN agencies and other bi/multilateral agencies, most of the South Asian countries have established national AIDS policies[39] and coordinating bodies through their Ministries of Health (Tables 3.3, 3.4). The national policies have helped set programme priorities and provided justification for unconventional measures such as sex education in schools or condom promotion. However, prevailing HIV/AIDS-related policies and strategies focus on those considered to be most marginalised and those considered likely to 'spread the infection' and largely pertain to injecting drug users, sex workers and truckers.

The advantages of early prevention, where many lives can be saved and healthcare and other costs can be averted, have yet to be fully agreed upon. The predominantly health-focused context of the epidemic and prevailing social norms and political imperatives have, in fact, resulted in the HIV/AIDS epidemic being labelled as someone else's concern or a foreign-driven agenda. Governments have yet to take the full responsibility to protect disempowered people from the stigma related to HIV/AIDS and to prevent its spread by including HIV-related strategies and budgets in the National Plans or enforcing legislation aimed at protecting the rights of PLWHA.

### 3.3.1 Range of responses

Within South Asia, there is considerable variation in the national policy responses to HIV/AIDS, mirroring the diverse nature of the multiple epidemics. Lessons can be drawn from countries such as Thailand, which have achieved notable successes in mitigating the spread and impact of HIV by expanding their responses beyond the confines of a health approach to one that embraces a broad spectrum of human rights and development needs. The conceptual shift reflected the new global recognition that HIV took root and flourished wherever human rights were violated and wherever communities were disadvantaged by poor development. During the initial years of the epidemic, the health sector took the lead role, instituting epidemiological monitoring and surveillance systems, introducing systems for blood screening and the use of sterile equipment and providing care and treatment facilities. As the epidemic progressed and a more comprehensive response evolved, other sectors such as education, industry and transport came to the forefront. An inclusive, comprehensive response to HIV/AIDS is still not readily discernible in the countries of South Asia, for various reasons. These include:

*Governments must intelligently apportion scarce resources and efforts between the especially vulnerable groups and the general population because the reality is that HIV prevention must be available to everybody regardless of their degree of vulnerability.*

***Over-identification of National AIDS Programmes with Sexually Transmitted Infections Control Programmes***

The relationship between national STI

**Box 3.12**

## Policy response to HIV in South Asia

The policy-related responses to HIV in South Asia are characterised by the following:

- Elaborate composition of several of the national policies.
- Reliance on public information and communication as methods for containing the HIV/AIDS epidemic rather than addressing the structural factors that drive the epidemic.
- Rhetorical support for multi-sectoral responses without adequate explanation of what these entail and how they can be achieved.
- Absence of adequate and timely resources to follow up and implement policies.
- Lack of sincere support from government departments other than health and development practitioners, including organisations of civil society working on poverty, gender and governance issues.

Governments in South Asia can collectively play an important role in containing the spread of HIV/AIDS within countries and in the region. Since most countries, except India, are considered to be in the early phase of the epidemic, the gravity of the HIV/AIDS challenge is often overshadowed by other health and development related needs. HIV thus spreads quietly and rapidly amidst malnutrition, TB, lack of access to safe drinking water, transport, adequate housing, illiteracy, child labour, conflict, etc.

programmes and national AIDS programmes took time to be defined and articulated in national AIDS policies and varies between countries. In Sri Lanka, for instance, the STI programme became the focus for national AIDS control and prevention activities. In India, however, while the implementation component of the STI programme was merged with the National AIDS Programme, the components of teaching, training, research and epidemiology have remained independent.[40] In Nepal, the National STI Programme is a special division under the National AIDS Programme. In some countries, STI programmes were established many years before the advent of the HIV epidemic. The integration of efforts against HIV with established STI programmes, thus, enabled speedy access to an already existing, albeit not yet fully developed, network of health personnel and institutions.

### *Health 'heavy' programme priorities*

It was long assumed that a 'miracle' drug or vaccine would be found and that HIV/AIDS would not assume intractable dimensions. Ministries of Health thus adopted a traditional public health approach. Monitoring the epidemic through HIV sero-surveillance assumed high priority. HIV testing with pre-and post-counselling was followed by advice to use condoms, clean needles and syringes etc. Screening blood for HIV was identified as an important means of preventing its further transmission. A poor grasp of the scale of the HIV/AIDS crisis made medical and other establishments reluctant to broaden the focus of the AIDS programme to include the participation of agencies outside the health sector.

### *Welfare-based, instrumentalist approaches*

The bulk of responses embody narrow bio-medical and instrumentalist approaches centred on epidemiology, 'target' populations and strategies to change individual behaviours. It was soon clear that much more is needed to meet the challenges of the epidemic in South Asia as most vulnerable people are unable to protect themselves in the absence of the power to influence their sexual, social or healthcare circumstances. The low

socio-economic status of women, young girls and boys, rampant child labour and socially sanctioned norms that violate human rights and promote subservience and stratification (whether in terms of class or caste) facilitate the spread of HIV. Those working to contain HIV/AIDS have mostly supported welfare-based, isolationist and vertical responses that focus on ferrying HIV-related services to those perceived as needing them. The dearth of appropriate attention to the interfacing issues of poverty, livelihoods, empowerment, gender and human rights guarantees that such responses have little impact. Successful HIV prevention and care challenges human and societal values and norms, intimate human behaviour and relationships and demands changes in norms relating to class, gender, sexuality and power. It cannot but involve all of society. Besides continued dependence on rational behaviour, incentives and subsidies to arrest the spread of HIV are increasingly being challenged by growing poverty and inequality, mismanagement and transaction costs and growing fundamentalism in South Asia.

### *Lack of operational tools for implementing the development agenda*

Reducing poverty, improving gender relations and preventing human rights violations as well as initiating an overall improvement in the quality of human life formed the thrust of the new developmental approach to tackle HIV/AIDS. The agenda gained importance as prospects of a vaccine or cure for HIV infection receded. However, such a broad agenda does not fall within the scope or mandate of a single ministry or agency but cuts across several of them, none being individually equipped to take on the daunting task of developing an overall response. Yet, it was the ministries of health alone that were burdened with the responsibility of developing plans without help from other ministries and agencies.

The predominant responses supported by countries in South Asia to address HIV/AIDS fall into two broad categories– individual and community-level initiatives.

### Individual-level initiatives

- **Mass and small group education:** As information was initially thought to be the key to behavioural change, HIV prevention programmes began with a focus on transmission and prevention. Several mass education efforts successfully raised public awareness of AIDS. Some education programmes even helped initiate behavioural change as evidenced by a rise in condom sales. Such programmes have fetched appreciable results in India and Nepal, among populations perceived as being vulnerable.
- **Peer education:** Trained peer educators recruit leaders from communities to educate their peers. This approach has helped increase community participation and engage diverse groups in the HIV/AIDS prevention efforts. Peer educators help develop and discuss safer sex, distribute condoms as well as IEC materials such as video clips and pamphlets and encourage meaningful engagement to improve community empowerment, health and human rights. The peer programmes carried out by sex workers in India and Bangladesh are noteworthy examples of the success of such initiatives.
- **Voluntary Counselling and Testing (VCT):** VCT has gained value as a service that can potentially help change negative attitudes about HIV

*Successful HIV prevention and care challenges human and societal values and norms, intimate human behaviour and relationships and demands changes in norms relating to class, gender, sexuality and power.*

and AIDS. However, testing is often given precedence over counselling in most South Asian countries. Promoting constructive attitudes among healthcare providers and improving the quality of counselling are public health imperatives. A Family Health International (FHI) sponsored evaluation of counselling initiatives in the South Asian countries in 2001 found that the quality of counselling, including counselling skills, were cause for concern.

*Promoting constructive attitudes among healthcare providers and improving the quality of counselling are public health imperatives.*

### Community-level initiatives

- **Outreach initiatives:** Outreach programmes enable individuals to circulate HIV-related information within existing social networks. Outreach workers help stimulate behavioural change in marginalised groups such as drug users, sex workers and their sexual partners. Outreach work is characterised by harm reduction strategies such as providing condoms to sex workers and does not necessarily consider the vulnerability factors associated with sex work. Outreach workers in South Asia face difficulties in working with marginalised and excluded communities given the environment of stigma and discrimination.
- **School-based programmes:** AIDS education has yet to find legitimacy in many schools in the countries of the region. Existing programmes provide basic AIDS information in the classroom, and discussions of sexuality and peer pressure are limited. Some educators may suffer inhibitions during such discussions while others may consider such education unnecessary and as polluting young minds. Besides, the vast majority of children vulnerable to HIV/AIDS are outside the formal system of education.
- **Condom promotion and social marketing**: Several studies from various South Asian countries identify lack of access and poor communication with sexual partners as major barriers to condom use. As a result, most HIV prevention programmes include the distribution of free condoms with the aim of improving their availability. The poor sustainability and reliability of free condom distribution programmes prompted the introduction of social marketing as a more viable alternative. In an effort to increase their social acceptability, condoms were made available at non-traditional outlets such as truck stops, bars and hotels. Social marketing has also helped promote voluntary counselling and testing. Bangladesh and India have reported that the simultaneous empowerment of sex workers has helped expand the scope of traditional condom distribution. SHAKTI, a HIV project of CARE Bangladesh working with street-based female sex workers, helped organise sex workers into the Durjoy Nari Shanga (Undefeatable Women's Committee) in 1988.[41] The group assumed the responsibility of marketing condoms to sex workers. Though sales declined during periods of police harassment, the group was able to increase the overall sales within a short period. In December 1998, only 39 per cent of all vaginal and anal sexual intercourse episodes had entailed condom use, but the figure rose to 52.4 per cent and 65.6 per cent over the subsequent two years.
- **Blood safety**: Unsafe blood and blood products have been major challenges to the containment of HIV since the beginning of the epidemic. Governmental efforts to prevent the spread of HIV through this route

include the provision of guidelines for the treatment of blood disorders and the rational use of blood, and the screening of blood for HIV. Blood donation is promoted to help reduce dependency on professional blood sellers. Despite monitoring, however, poor compliance to uniform standards of blood safety is common in South Asia.

### 3.3.2 National responses

#### Afghanistan

Afghanistan has yet to formulate its National AIDS policy or national plan on HIV/AIDS.[42] The government has neither made attempts to confirm or rule out the presence of HIV/AIDS nor has it initiated steps to lower vulnerability to HIV among its peoples. The number of HIV/AIDS cases in Afghanistan is not known but is probably less than 100.[43]

#### Bangladesh

Bangladesh established a National AIDS Committee (NAC) in 1985, with a Technical and Coordination Committee at the central level and other committees at various peripheral levels. The Ministry of Health and Family Welfare formulated a National Policy Document on HIV/AIDS and STI that received cabinet approval in 1997 and a framework for its implementation was developed between 1997 and 2002. Bangladesh's HIV/AIDS policy documents pay special attention to injecting drug use and approve harm reduction as an appropriate strategy. However, the Ministry of Home Affairs, which is concerned with implementation of the Act, does not approve of harm reduction as it conflicts with existing drug laws. Under the Strategic Implementation Plan (SIP) for HIV/AIDS Prevention and Control under the Ministry of Health and Family Welfare, Bangladesh initiated HIV prevention efforts among its prisoners. Acknowledging that military and police personnel also buy sex, the SIP gave near-equal importance to HIV prevention among the police, the military and sex workers. The SIP aims to achieve about 80 per cent condom usage among brothel-based sex workers.

In Bangladesh, there is no specific legislation to protect the rights of PLWHA. The Constitution of Bangladesh however, confers fundamental rights such as the right to equality, non-discrimination, life, liberty and privacy[44] to all its citizens. The National Policy on HIV/AIDS and STD related issues endorses the Universal Declaration of Human Rights (UDHR) as a standard for policy making and action at all levels in the response to HIV/AIDS and STDs in Bangladesh. In the context of access to healthcare, the policy states that "health professionals must treat all persons seeking medical attention without discrimination and prejudice".

*Despite monitoring, however, poor compliance to uniform standards of blood safety is common in South Asia.*

#### Bhutan

The National STD/AIDS Control Programme in Bhutan, begun in 1988, has adopted a multi-sectoral initiative involving all sections of society. The programme is integrated into the country's decentralised national health system. HIV education has been taken to rural communities and integrated with the education curriculum. The momentum of these efforts has been sustained by the Health Ministry's information education activities.[45] According to UNAIDS, more than 25 per cent of the government's total budget is allocated to healthcare and education, both of which are provided free in Bhutan.[46]

#### India

The Indian Government formed a National AIDS Committee in 1986 and launched its National AIDS Control

Programme in 1987. In 1992, the National AIDS Control Organisation (NACO) was established to implement the strategic plan for prevention and control of AIDS in India for 1992-97. State AIDS Cells were set up in each State for the expeditious implementation of the programme. Currently, Government of India is implementing a comprehensive National AIDS Control Programme – Phase II through autonomous State AIDS Control Society (SACS) in all States and Union Territories. A multi-sectoral response has been launched involving various ministries. In addition an innovative strategy through Family Health Awareness Campaign has been initiative to mainstream HIV/AIDS into the country's health care system.

In the absence of an anti-discrimination legislation, courts in India have followed the principles enshrined in the Constitution, which guarantee fundamental rights including the right to equality, the right against discrimination and the right to protection of life and liberty.[47] While these provisions have been interpreted to protect against discrimination by the State[48] on the basis of HIV status,[49] the juridical interpretation now also needs to provide protection from discrimination in the private sector. After all, fundamental rights are enforceable not only against the State but also applicable to all citizens and non-State actors.

Although the right to health is a fundamental right, PLWHAs do face discrimination in healthcare settings. This is particularly true for injecting drug users, who are easily identified by needle marks and abscesses. Discrimination takes many forms including outright denial of treatment, physical isolation in wards, early and inappropriate discharges, delays in treatment, higher treatment charges and prejudicial comments and behaviour. Confidentiality about HIV status is often breached.[50]

**Box 3.13**

### The right to confidentiality for PLWHA in India

In 1998, in a defining judgment in Mr. X V. Hospital Z, the Supreme Court of India held that although doctor-patient confidentiality was part of the code of medical ethics, a patient's right to confidentiality was not enforceable if he or she was HIV positive and posed a risk of transmitting the infection to the prospective spouse. Mr. X's case concerned the issue of breach of confidentiality of the petitioner's HIV-positive status by a hospital blood bank to the petitioner's relatives.

Since HIV-related infection endangers the life of the spouse, the Court held that the right to privacy of the patient is not absolute in this situation and may be restricted. The court also ruled that since Indian matrimonial laws allow venereal infection to be sufficient grounds for divorce, a person suffering from a venereal disease has no right to get married till s/he is fully cured and such right must be treated as a 'suspended right'. It further observed that since acts likely to spread communicable diseases are a crime under the Indian Penal Code, the failure of the hospital to inform the spouse of the disease would make it *participant criminis*.

Later, the Lawyers' Collective's HIV/AIDS Unit filed a case on behalf of Mr. X, seeking clarifications and challenging the 1998 judgment. On 10 December 2002, the Supreme Court held that all observations relating to marriage in the earlier judgement were not warranted as they were not issues before the Court. The Supreme Court did, however, state that its pronouncements regarding the role of hospitals to make disclosure of HIV positive status in that judgment remain as they were made. In effect, therefore, the 1998 judgment, to the extent that it suspended the right of PLWHA to marry is no longer good law and the right is restored. However, his does not take away from the duty of those who know their HIV-positive status to obtain informed consent from their prospective spouse prior to marriage.

### Iran

The National Committee to Combat HIV/AIDS, chaired by the Minister of Health, was established in 1987. The Committee provides policy guidance to the National AIDS Programme. The National Strategic Plan, though based on multi-sectoral collaboration and coordination, largely focuses on prevention.[51]

### Nepal

Nepal's National AIDS Prevention and Control Programme was established in 1995. The same year, the Ministry of Health adopted a National Policy on HIV/AIDS/STDs, establishing a multi-sectoral approach involving 12 government ministries.

The Constitution guarantees citizens certain fundamental rights. These include the right to equality, which prohibits the state from discriminating on the basis of religion, race, sex, caste, tribe, ideological conviction or any of these.[52] Although this principle has not been tested in courts as yet in the context of HIV/AIDS, this provision would oblige State-run healthcare institutions to provide non-discriminatory treatment to PLWHA. Further, there is a provision that enables the State to take affirmative legislative or policy action to protect and advance the interests of special groups, including those who are physically or mentally incapacitated.[53] Whether HIV/AIDS would qualify for such a provision is subject to judicial interpretation. The Constitution allows restrictions to be imposed on the right to freedom and personal liberty on the grounds of public health and morality[54] and proponents of isolationist public health strategies may seek to apply this principle to PLWHA. The right to privacy is considered inviolable except as provided by law[55] and, as in India, assumes special significance in the context of doctor-patient confidentiality about HIV status.

Notwithstanding constitutional guarantees, healthcare professionals routinely discriminate against PLWHA, often refusing to treat people with HIV. Moreover, Nepal's healthcare system is inadequately equipped to handle HIV/AIDS cases[56]. The Infectious Disease Act, 1963, the Prisons Act, 1963, and the Hotel Management and Sales and Distribution of Liquor (Control) Act, 1966 all discriminate against PLWHA, segregating them on the basis of their sero-status. PLWHA are forced to carry their burden alone to avoid being alienated by their families and in order to retain their jobs.[57]

### Pakistan

Pakistan's Federal Ministry of Health initiated a National AIDS Prevention and Control Programme (NACP) in 1987. In early 2001, NACP developed a National HIV/AIDS Strategic Framework to guide the activities of the HIV/AIDS stakeholders in Pakistan. This framework encompasses nine priority areas, including coordinated, multi-sectoral responses, reduction of risk among vulnerable groups, reduction of vulnerability among youth and improved quality of care for PLWHA.[58]

The Constitution of Pakistan prohibits the State from discriminating on grounds of sex, caste, race, religion, residence and place of birth in matters pertaining to access to public spaces and employment.[59] In principle, this would apply to discrimination on the basis of HIV status in State-run medical institutions. There is, however, no legislation to cover discriminatory practices in private healthcare settings. Increased knowledge and compliance with universal precautions within the

healthcare setting and improved quality of care for PLWHA[60] are among the priority areas identified in the National HIV/AIDS Strategic Framework. In spite of this, there are reports that PLWHA in Pakistan not only suffer the physical anguish of the disease but also experience isolation, discrimination, and abuse.[61] Clearly, the legal principles and fundamental rights enshrined in the Constitution do not always ensure access to healthcare services for PLWHA and other marginalised communities. This only underscores the need for the involvement of other agencies in the HIV/AIDS prevention efforts. An ILO project on HIV/AIDS education for workers aims to improve their understanding of the social and labour implications of HIV/AIDS at the workplace.

Pakistan also has a Disabled Persons' (Employment and Rehabilitation) Ordinance 1981,[62] which provides for rehabilitation and employment of persons who are disabled due to disease. It remains to be seen, however, if PLWHA qualify to be covered under its provisions. Moreover, the ordinance does not deal with discrimination.

### Sri Lanka

The Constitution of Sri Lanka guarantees the fundamental right to access healthcare services to all its citizens.[63] It also ensures the fundamental right to equality and prohibits discrimination on the grounds of ethnicity, religion, language, caste, gender, sex, marital status etc.[64] There has been at least one case of termination of employment on the basis of HIV status in Sri Lanka.[65] There have been efforts to urge employers not to fire employees solely on the basis of their HIV positive status.[66]

Tables 3.3 and 3.4 indicate that the South Asian nations, with the notable exception of Afghanistan, have taken steps to tackle HIV/AIDS. An evaluation needs to be done of the coverage and effectiveness of governmental and non-governmental programmes in prevention and their impact on poor and marginalised populations. Data on patterns of HIV infection and sexual behaviour continues to be scarce and most countries with nascent epidemics need to expand data collection and analysis. Crafting cost-effective programmes and identifying policy and programme needs is also essential.

**Box 3.14** **The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)**

*"The purpose of the Fund is to attract, manage and disburse additional resources through a new public-private partnership that will make a sustainable and significant contribution to the reduction of infections, illness and death, thereby mitigating the impact caused by HIV/AIDS, tuberculosis and malaria in countries in need, and contributing to poverty reduction as part of the Millennium Development Goals."*—GFATM

More than $3 billion has been pledged to the Global Fund, although less than a third has reached the Fund as of 2003. In January 2003, the Global Fund approved the second round of grants to the tune of $866,000,000 over two years, to be given to countries around the globe. It has been estimated that an effective global response to the three diseases would cost $10 billion a year. While the Global Fund will be a key player in funding such responses, the resources so far pledged and released to the Fund will only cover a fraction of the total need. From South Asia, proposals of a total value of $72,215,420 from India, Pakistan, Nepal, Bangladesh, Iran, and Afghanistan were approved in January 2003. India got the largest share of the funds and Afghanistan the least. The proposals from Bhutan, Maldives and Sri Lanka did not receive funds in the second round but might get funded in the coming rounds to approve grants from the GFATM.

This chapter analysed policy responses that directly relate to HIV/AIDS and those that influence the socio-economic context of the epidemic. Clearly, the latter will determine the course of the epidemic in South Asia. While countries wage a continual struggle to upgrade the social and economic status of their peoples and agree that vulnerability to HIV/AIDS is linked to poverty, these linkages have never been clearly analysed or articulated. Poverty is viewed as a static condition rather than as an outcome of the various pressures that impinge on people's capacity to achieve economic and social security. The term 'impoverishment' is preferable, as it is suggestive of the dynamic processes leading to poverty. Impoverishment can result from long-term or sudden unemployment, loss of assets (such as land), lack of access to basic social services (e.g., education, health, security, and transportation), or lack of control over everyday decisions. Impoverishment is often characterised by inequalities between socio-economic groups.

In almost all the countries, ministries

Table 3.3

**Policy responses to HIV/AIDS in South Asia, 2001**

| | Afghanistan* | Bangladesh | Bhutan[67] | India[68] | Iran (I.R.)[69] | Nepal | Pakistan[70] | Sri Lanka[71] |
|---|---|---|---|---|---|---|---|---|
| National HIV/AIDS Programme | N.A. | Yes | Yes, as an unit within Ministry of Health | Yes | Yes, as a committee, not a programme | Yes | Yes, but limited resources and impact | Yes |
| National Policy | N.A. | Yes, elaborate policy | Limited policy adopted to provide AZT (Zidovudine) to pregnant women with HIV | Yes, elaborate policy | Yes | Yes, focus on human rights | N.A. | Yes |
| National Strategic or Action Plan | N.A. | Yes, including specifics for several issues | A medium-term plan | Yes | Yes | Yes | In 2001, but requires prioritisation | Yes |
| Resources available (government and other) | N.A. | Government has taken a World Bank loan; reliance on donors | Donors | Yes, with two large World Bank loans and Global Fund | Donors, government resources and Global Fund | Yes | Yes, but only one-third of what was originally budgeted | Yes, donors, World Bank loan |
| Programme Decentr-alised | N.A. | Occurring | Yes, as a part of the national health structure | Yes, but some states are much stronger than others | N.A. | Noted in strategy | Yes, to the four provinces, of which two are functioning | Noted in strategy |

* There is little official or unofficial data for Afghanistan. Furthermore, events since October 2001 make any comments about "government" policy problematic, if not irrelevant.

*Note*: N.A. indicates not available, not necessarily the absence of a policy response.

other than health have seldom been involved in the HIV-related policy-making process. Some countries have involved the ministries of education and women's affairs. The organisational structure of ministries and departments varies from country to country and so does the relative influence wielded by one ministry vis-à-vis another. Sri Lanka, for instance, had, at one time, a combined Ministry of Health and Women's Affairs and the issue of HIV and women was approached with a health bias. On the other hand, India and Pakistan, each with a separate ministry for women, were able to bring to the problem a sharper focus on developmental concerns of women.

*The mechanism to deliver 'public goods' for national HIV/AIDS prevention programmes can move no faster than any other and NGOs that adopt a fast track often find themselves in conflict with the law or with the authorities concerned.*

A multi-sectoral approach has also been slow to emerge in budgetary allocation and programme development within ministries other than health, as these ministries have been reluctant to prise funds away from tightly controlled or limited budgets and competing demands. Yet, countries like Bangladesh were relatively pro-active in attempting to develop multi-pronged programmes even at a time when the infection rates were low. UNAIDS estimated that at the end of 2001, there were 13,000 persons with HIV/AIDS, and that 1,000 deaths due to AIDS-related infections had occurred in that year.[72] The rates are higher in specific groups such as injecting drug users (2.5 per cent) and commercial sex workers (0.6 per cent).[73]

HIV/AIDS came to be accorded high national priority only in recent times in South Asia, whereas in Africa, the Declaration on the AIDS Epidemic was endorsed by the Heads of State and Government of the Organisation of African Unity (OAU) in June/July 1992 itself. The Declaration adopted the target that: "By the end of 1992, each one of us will be publicly recognised as the leader of the fight against AIDS in our country."

## 3.4 Challenges and Imperatives

South Asian countries face various challenges in the implementation of their national plans of action to tackle HIV/AIDS. These challenges are heightened by the persistence of the factors that constrain development in general. The mechanism to deliver 'public goods' for national HIV/AIDS prevention programmes can move no faster than any other and NGOs that adopt a fast track often find themselves in conflict with the law or with the authorities concerned.

People living with HIV/AIDS continue to feel isolated, neglected and deprived of the benefits intended for them. Urbanisation and post-liberalisation public culture – consumerism fuelled by greater media exposure and a tendency towards increased commodification of women – have prompted changes in the lifestyles of the younger generation. These only make them more vulnerable to infection, underscoring the need for urgent preventive measures. Even the best planned programmes face formidable problems in the South Asian region. The sheer magnitude of the geographical and demographic challenges in some of the countries, the staggering numbers of people below the poverty line, low levels of literacy, large migrant populations, inadequate health infrastructures and competing demands for scarce resources may all conspire to relegate HIV/AIDS to the backburner.

The South Asian Association for Regional Cooperation (SAARC) Secretariat has yet to accord HIV/AIDS priority status. South Asian countries can benefit through

Table 3.4

**Policies and practices on selected HIV/AIDS-related issues**

| | Afghanistan | Bangladesh | Bhutan | India | Iran (I.R.) | Nepal | Pakistan | Sri Lanka |
|---|---|---|---|---|---|---|---|---|
| Adolescent Reproductive Health Policy/ Programmes [74] | Not recognised; female access to services severely limited | Not a high priority; age of legal marriage has been raised; efforts to have sex education in schools resisted | No policy action, but some discussion | Major concern: increase in age for marriage/ some Information, Education and Communication | Services for married adolescents; minimal for unmarried; HIV/AIDS in secondary school curriculum | HIV education in secondary schools, but policy not ratified | Minimal policy concern and services | Within national reproductive health policy/ in school curricula |
| Harm reduction drug efforts | Drug production and trade facilitated by unwritten national policy | N.A. | N.A. | Harm minimisation programmes are encouraged through targeted inter-ventions for IDUs | Drug use illegal; large percentage of IDUs who are jailed are or become HIV positive[75] | N.A. | N.A. | N.A. |
| Trafficking | N.A. | Laws exist to prevent trafficking | Prohibited | Prohibited, but trafficked women/girls enter the country | Prohibited | Policy and action plan exist to prohibit trafficking for the sex trade; practice continues | Illegal, but occurs | Illegal |
| Protection for HIV positive employees | N.A. | N.A. | N.A. | Upheld by courts, but discrimination occurs in practice[76] some company policies emerging | Health ministry prohibits firms from dismissing HIV positive employees[77] | N.A. | N.A. | Very limited |

*Note:* N.A. indicates not available

**Box 3.15**

## Critical role of political leadership in the response to HIV/AIDS in South Asia

Several activists have pointed out the need for greater urgency on the part of political leaders in South Asia to recognise the existence of the problem and raise the resources required to deal with it. In India, for instance, it was only at the Global AIDS Law Conference in 1995 that the President, Prime Minister and the Minister of Health shared a platform to speak on HIV/AIDS. In 2000, the Prime Minister of India chose to refer to this problem in his address to the nation. Thereafter, the issue of combating the epidemic has gained prominence. India's Prime Minister has since met with the Chief Ministers of the six states with high prevalence rates to discuss the pace of implementation of state policies and interventions.

This initiative received wide publicity, thus adding a sense of urgency and accountability for accelerated state-level action. The Prime Minister also met with business leaders and supported the idea of establishing a Business Coalition Trust for HIV/AIDS in September 2001. In December 1998, the Prime Minister Atal Bihari Vajpayee addressing a meeting on the National Program for Prevention and Control of HIV/AIDS declared that "HIV/AIDS is the most serious public health problem facing India". Chandrababu Naidu, the Chief Minister of the state of Andhra Pradesh, stated in 2002 that: "I consider AIDS the biggest enemy for society. If we ignore it now, we will have problems. That is why we have to break the silence". The Indian delegation to the UN General Assembly Special Session on HIV/AIDS in June 2001 was led by the Union Health Minister and included the leader of the opposition. A National Conference on Human Rights and HIV/AIDS was organised in November 2000 by NACO in collaboration with UNAIDS and specialised agencies of the UN system.

In Pakistan, the Prime Minister's address to the nation in 1998 contained details of the National Plan of Action on Women developed by the Ministry of Women's Development. The Plan addressed not only HIV/AIDS, but also the broader issues of women and poverty, the impact of economic policies on women, sexual violence, discriminatory laws and practices and human rights.

In Nepal, on 5 December 2000, HRH the late Crown Prince had remarked that: "HIV/AIDS has now become a problem that no one can afford to ignore".[78] The Health Minister also stated, in 2002, that the importance of regional responses and action remains imperative to containing the epidemic in Nepal. The Queen of Bhutan, HRH Ashi Sangay Wangchuk has also been a powerful advocate for the rights of PLWHA and has spoken at various international platforms such as the fifth and sixth International Congress on AIDS in the Asia Pacific (ICAAP).

In Maldives, at the National Conference on the Maldivian Child held in July, 1991, the President Maumoon Abdul Gayoom stated that: "…I would like to emphasise the fact that Islam does not prohibit the effective planning of family size or the use of contraceptives for that purpose. There should, therefore, be no hesitancy on any religious grounds to use contraceptive methods in carrying out our child spacing and family planning programmes".[79] This statement became particularly useful when the Ministry of Health began to encourage the use of condoms as a means of HIV prevention.

technical exchange with developing countries that have much to offer. With concerns that India might emerge as the global epicentre of the second wave of HIV infections, HIV/AIDS becomes a matter of serious concern for the entire region.

The South Asian countries must now address the implications of the World Trade Organization (WTO) regimes regarding Intellectual Property Rights and patent systems on ARV drug pricing and the growing demand for such drugs. The impact of growing conflict situations and the limited availability of resources in the countries of the region may well be compounded by imminent global recession. Health ministries and NGOs that are dependent on donors may find funding for HIV/AIDS drying up as wealthy nations re-adjust developmental aid programmes and priorities.

Countries in South Asia, being in the early phase of the HIV epidemic, still have ample opportunity to avert large-scale future infections. An environment supportive of broad-based governmental initiatives is emerging, albeit slowly. The multiplier effect of efforts against AIDS through developmental responses such as literacy programmes, income generation schemes and reproductive health initiatives is gaining ground. NGO participation is being increasingly recognised as being critical to the success of such efforts. In the first decade of this new century, there is more hope than ever before that countries in South Asia will be better placed to come to grips with the epidemic.

*"The 'low prevalence' label may misguide policymakers into downplaying the significance of the epidemic. There is the additional danger of people failing to protect themselves in situations of high risk in 'low prevalence' countries, as they do not perceive HIV as being present at a degree serious enough for concern.*

*This global epidemic, which has no boundaries, has become the number one health threat and a major impediment to development for many countries of the world. The Maldives, a small island developing country, situated in the middle of the vast Indian Ocean with a population of less than 300,000 people, is no exception."*

Address by Mr. Hussain Shihab, Permanent Representative of the Maldives to the United Nations at the United Nations General Assembly Special Session on HIV/AIDS (UNGASS), 2000

# Human Rights and HIV/AIDS

*"An important aspect of HIV/AIDS policy is to ensure the protection of the human rights of those who are vulnerable and also those who are infected. Appropriate workplace policies that ensure awareness, access to health services, non-discrimination at the workplace and care and support for those infected go a long way in mitigating the impact of HIV/AIDS".*

Atal Bihari Vajpayee, Indian Prime Minister, at the launch of the Indian Business Trust for HIV/AIDS, New Delhi, September 2001

Chapter 4

# Human Rights and HIV/AIDS

## 4.1 Introduction

This chapter looks at the necessity of using a human rights approach in the fight against HIV/AIDS. It argues that the epidemic can be combated effectively on the one hand only with an enabling legal environment, and on the other, societal acceptance through sustained sensitisation and the elimination of stigma and discrimination.

Many of the key strategies against HIV—especially those dealing with behaviour change among vulnerable groups—require a set of legal and statutory changes that make it feasible for PLWHA to have a greater voice in decisions affecting their own lives, without fear of being stigmatised and discriminated against. Treating HIV prevention as a core component of the policy framework of human development can help accomplish this task, since the objective of a 'caring society' is common to the concerns of human rights and AIDS activists.

### 4.1.1 Understanding human rights within a human development framework

Human rights are now widely accepted as being central to any community or nation's effective response to HIV/AIDS. This has been acknowledged both in international documents and national responses.[1] It is important, then, to assess the role and importance of a human rights framework in responding to HIV/AIDS.

Human rights are inherent in and inalienable to every individual. They render the government and the larger society accountable to the citizen. Every individual has a right to live with freedom and dignity and 'citizens' are the 'duty holders' obligated to respect, protect and address this fundamental need. Human rights are not given or bestowed upon people by individual governments or society but are earned by virtue of being born `human'. As Justice J.S. Verma, former chairperson of India's National Human Rights Commission so aptly put it, "dignity is the entitlement of *all* as long as life exists."[2] HDR 2000 defines human rights as "the rights possessed by all persons, by virtue of their common humanity, to live a life of freedom and dignity. They give people moral claims on the behaviour of individuals and in the design of social arrangements–and are universal, inalienable and indivisible." The value of a human rights approach lies not only in principles such as state accountability and popular participation, but also in the normative potential of rights to alleviate injustice, inequality and poverty.[3]

The conceptual framework of human development places people at the centre as empowered beings. It embodies a rights-based approach to development that could serve as the appropriate frame of reference for integrating the human rights concerns in the struggle against HIV. Principles of GIPA are, therefore, intrinsic to the human development approach. "The protection of human rights is essential to safeguard human dignity in the context of HIV/AIDS and to ensure an effective, rights-based response to HIV/AIDS. An effective response requires the implementation of all human rights, civil and political, economic, social and cultural, and fundamental freedoms of all people, in accordance with existing international human rights standards…".[4]

*The international response to HIV/AIDS has been characterised by two diametrically opposed public health approaches: the isolationist approach and the integrationist approach.*

Addressing the epidemic within a human rights framework involves a strong emphasis on acceptance and non-discrimination of populations perceived to be more vulnerable to HIV. The last decade has witnessed the increasing concentration of the epidemic in the developing world where the response needs to not only protect individual rights and privacy, but must also deal with wider developmental concerns like poverty, gender and inequality. Such an approach will encompass the International Covenant on Economic and Social Rights, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Convention on Rights of the Child (CRC). In sum, it will capture the spirit of the Universal Declaration of Human Rights, which talks about poverty being the greatest denial of human rights.

### 4.1.2 Relevance and importance of human rights to HIV/AIDS

It has been argued that protecting the rights of those affected and at risk is the best public health strategy to cope with an epidemic. A rights-based approach recognises vulnerability to the epidemic not just in terms of individual behaviour but also the social, cultural and economic conditions that lead to this vulnerability. It also recognises that the vulnerability of women, children, migrant workers, men who have sex with men, injecting drug users and sex workers can be reduced through the protection of their human rights. It is only when the stigma and discrimination faced by PLWHA is eliminated, that they can be empowered to take control of their lives. Protection of human rights helps to create a supportive environment, encouraging PLWHA to access the various health and HIV/AIDS-related social services and, consequently, stimulating behaviour change. This position has been vindicated by the experiences of several countries.[5]

The international response to HIV/AIDS has been characterised by two diametrically opposed public health approaches-the isolationist approach and the integrationist approach. The isolationist response proposes three basic strategies for HIV/AIDS prevention: compulsory and universal HIV screening, the disclosure of the HIV status of those testing positive and their isolation from larger society through discriminatory practices. The integrationist strategy, on the other hand, proposes voluntary testing following informed consent, the non-disclosure of a person's HIV-positive status and the equitable treatment of PLWHA in healthcare, employment and all other facets of life.

Integrationist policies were based on the fundamental human rights of individuals to self-autonomy, privacy and equality. The basis of this philosophy was that, in the long term, voluntary testing, confidentiality and non-discrimination would encourage people to come out and access health services. This, in turn, would

increase the possibility of bringing about behaviour change and instilling a sense of personal responsibility through counselling, thus helping retard the spread of the virus. The integrationist approach, therefore, sought to battle and reduce stigma whereas the isolationist approach sought to increase it, thus pushing the epidemic further underground.

Initially, the isolationist response, requiring as it did the disclosure of the positive status of persons in order to protect the rest of society from the spread of the epidemic,[6] was felt to be most appropriate in South Asia. However, this approach was given up when it was seen to be violating people's human rights and fuelling stigmatisation.[7] HIV-related discrimination first attracted attention in the region when India announced the testing of foreign students, mainly those of African origin.[8] This was followed by an announcement that certain categories of long-term residents also had to be tested for HIV. Concerns that foreigners might transmit the infection to the local population prompted the preparation of a draft bill prohibiting marriage between foreigners and Indian nationals. Fortunately, the proposed legislation did not see the light of day.

The realisation gradually dawned that the isolation versus integration debate could not be perceived as an issue of public interest versus individual rights. It came to be acknowledged that the protection of the individual was itself in the public interest as it increased accessibility to services and brought the epidemic into the open. This enabled concerted and effective public health interventions that were ultimately beneficial to society at large.

An outstanding example of a successful, integrationist rights-based approach is that of the STD/HIV Intervention Project (SHIP) in the red-light area of Sonagachi in the Indian city of Kolkata (See Box 4.1). The empowerment of sex workers in SHIP brought about significant improvements in their health as evidenced by a drastic decline in STD rates and the marginal rise in HIV infection.

Certain key legal issues arose in the context of HIV/AIDS, which the human rights framework had to consider. The three issues at the core of any response to HIV—consent to testing, non-disclosure of HIV status and anti-discrimination–required that policies be informed by three fundamental human rights— those of self-autonomy, confidentiality/privacy and equality.

The issue of consent to testing addressed the question of whether testing should be voluntary or mandatory. Consent, therefore, dealt with the right to self-autonomy, to decide for oneself what can be done to one's own body.

The issue of non-disclosure was based on the right to privacy/confidentiality. It was also based on the very pragmatic consideration that disclosure (since that might lead to stigma and discrimination) would make people distrust healthcare and shy away from it, thereby driving the epidemic underground.

Anti-discrimination was based on the fundamental right to equality – that HIV positive status should not prevent persons from accessing services (healthcare, education, employment, insurance, travel etc.) and lead to their being treated unequally from others.

These issues also exemplified the famous paradox—that the best way to control HIV/AIDS is to protect those most vulnerable and those affected.[9] Help,

*The isolationist approach was given up when it was seen to be violating people's human rights and fuelling stigmatisation.*

**Box 4.1** **Sexual negotiation as empowerment: the Sonagachi approach**

For most Indian women, it is almost impossible to even contemplate assertiveness in a sexual relationship with a man and negotiate safer sex. However, a group of sex workers in Sonagachi in Kolkata are successfully negotiating safer sex relationships with clients as well as better treatment from society, including from the police. In 1992, the STD/HIV Intervention Project (SHIP) set up a STD clinic for sex workers to promote disease control and condom distribution. However, the focus of the programme soon broadened to address structural issues of gender, class and sexuality.

SHIP aims to build sex workers' capability to question the cultural stereotypes of their society, and build awareness of power and who possess it. The sex workers themselves decide the programme's strategies. Twenty-five per cent of managerial positions in the project are reserved for sex workers and they hold many key positions. From the initial stages itself, they were invited to act as peer educators, clinic assistants and clinic attendants in the project STD clinics.

The project was built around the following ideas and strategies:

- The peer educators were provided with a uniform of green coats, and staff identity cards, which gave them social recognition. A series of training activities were organised, with the aim of promoting self-reliance and confidence among the sex workers, and earning respect from the community rather than perpetuating the attitude that they were 'fallen' women
- Sixty-five peer educators went from house to house in the red-light areas, equipped with information on STD/HIV prevention, AIDS, how to access medical care and ways of questioning power structures that promoted violence
- Peer educators conducted a survey with babus (long-term regular clients). Only 51.5 per cent of the clients had heard of HIV/AIDS and 72.7 per cent had never used a condom. As a result, alliances were formed between the sex workers and the clients to promote safer sexual practices, including the elimination of sexual violence in the area
- A training session for police personnel was organised by the All India Institute of Health and Hygiene. By the end of April 1996, about 180 police officers had attended these training programmes
- In 1995, the Durbar Mahila Samanvaya Committee (DMSC), a union for sex workers, was formed to promote and enforce their rights. The state government formally recognises the regulatory board that DMSC members set up with some state departments. This board ensures that all stakeholders in the red light area adhere to a mutually agreed code of conduct, such as returning children trafficked to the area to their homes
- Stories from history concerning how sex workers had fought for their rights are told, enabling SHIP to engage people's emotions and rally them round a common objective
- The project responded to the needs of the sex workers as they arose. For example, SHIP provided non- formal education when the demand for literacy arose, as well as vocational training programmes for sex workers concerned about security in old age. A credit and savings scheme was also established to help sex workers set up self-employment schemes
- The Komal Gandhar theatre group set up by sex workers has enabled them to communicate methods of negotiating safer sex with clients, pimps, the police and brothel owners in a non-threatening environment
- SHIP has negotiated with groups of (mainly) men, including pimps, brothel owners, clients and the police, to convince them of the importance of their campaign and even enlisted their support for improved rights for sex workers. This represents a direct challenge to oppressive patriarchal structures
- Successful implementation of the project is not just about changing behaviour but also attitudes like the way that society views sexuality, the lack of social acceptance of sex work and the legal ambiguities relating to it
- The sex workers have met with a range of partners, and have developed the view that their struggle as sex workers is not very different from the struggles of poor women in the informal sector. The struggles are against patriarchy and domination

*Source:* Extract from Nath, 2000

support and protection for the infected and their carers has been identified as a key strand of the campaign against HIV/AIDS. "Protecting the groups and individuals at risk is a moral obligation, a priority strategy owed to brothers and sisters because, like us, they are human. They feel. They suffer. They and their families are cruelly burdened when this infection takes hold, and nowhere more so than in poorer, developing countries where palliative drugs are generally unavailable, social support outside the family, is negligible and where stigmatisation based on ignorance and prejudice is rife. Prevention is not the only strategy."[10]

There are certain ethical issues that are important considerations in the human rights-based approach to HIV/AIDS (See Box 4.2).

With the realisation that the denial of fundamental human rights had to be tackled for HIV/AIDS to be effectively controlled, other key legal issues addressing the fundamental right to life required consideration. It was noticed that those most susceptible to HIV/AIDS were persons who were legally and socially disempowered and whose basic rights were denied to them. These groups did not have the basic human rights to lead a wholesome life, which could guard them against public health crises, particularly HIV/AIDS. These populations included injecting drug users, prisoners, sex workers, women, women experiencing gender violence, children, migrant workers and men who have sex with men.

Therefore, it was understood that enforcing positive rights (the entire range of socio-economic rights), law reform and decriminalising behaviours would help in controlling the spread of HIV/AIDS within these groups and, thereby, its spread within the general population as well. In order to achieve this, reviewing and amending laws that prejudice, criminalise and marginalise these groups is essential, and this needs to be supported by changes in underlying cultural and social attitudes.

It is important to demonstrate the link between globally recognised human rights standards and the response to HIV/AIDS. Table 4.1 attempts to highlight the practical aspects of human rights in the context of HIV/AIDS.

*It is important to demonstrate the link between globally recognised human rights standards and the response to HIV/AIDS.*

## 4.2 HIV/AIDS, Stigma and Discrimination and Human Rights in South Asia

"Research shows that discrimination is most frequently associated with diseases that have severe (incurable and progressive) outcomes and modes of transmission that are perceived to be under an individual's personal behavioural control.[11] Unfortunately HIV/AIDS fits the criteria perfectly. HIV/AIDS discrimination has led to the use of such terms as 'leper' to label those that are infected with disease as well as to brand them as 'others' or 'deviants'.[12] Metaphors portraying AIDS as retribution or punishment for a sinful life or moral failure are a powerful indication

**Box 4.2** **Ethical issues related to HIV/AIDS**

- Screening and testing policies, including screening of pregnant women
- Confidentiality and privacy
- Discrimination at the workplace
- Blood safety and related issues
- Access to and delivery of healthcare
- Bio-medical research (e.g. development of vaccine and drugs and trials; implementation of public health policies in prevention and control)

Table 4.1

**Legal and human rights of those affected by HIV/AIDS**

| Some key human rights principles | HIV/AIDS-related action | Relevant human rights instruments |
|---|---|---|
| The right to the highest attainable standard of physical and mental health | Ensure that HIV-prevention tools and services (such as treatment for STIs, provision of male and female condoms, and voluntary counselling and testing) are available, together with drugs for opportunistic infections, pain and suffering, and anti-retrovirals. Ensure provision of the necessary health infrastructure and personnel. | • Article 25 of the Universal Declaration of Human Rights<br>• Article 12 of the International Covenant of Economic, Social and Cultural Rights<br>• Article 12 of the Convention on Elimination of All Forms of Discrimination Against Women Articles 24 and 25 of the Convention on the Rights of the Child |
| The right to information and education | Provide information and education relating to sexual health and HIV prevention. | • Article 19 of the Universal Declaration on Human Rights<br>• Article 17 of the International Covenant on Civil and Political Rights<br>• Article 37 of the Convention on the Rights of the Child |
| The right to privacy | Ensure that counselling and testing are voluntary, and that HIV test results are confidential; guarantee the right of non-disclosure to the third parties. | • Article 12 of the Universal Declaration on Human Rights<br>• Article 17 of the International Covenant on Civil and Political Rights<br>• Article 37 of the Convention on the Rights of the Child |
| The right to livelihood and living with dignity | Facilitate safe mobility practices and ensure access to reliable information with regard to vulnerability to HIV/AIDS and trafficking, especially for women and children | • Article 23 and 25 of the Universal Declaration of Human Rights<br>• ILO Convention 97, Article 1 of the Migration for Employment Convention<br>• Articles 36 and 39 of the Convention on the Rights of the Child |

*Source:* UNAIDS. 2002c

of the stigma attached to HIV/AIDS. Through stigma, society often blames infected people for being ill and asserts the innocence and health of the stigmatisers".[13]

While many serious diseases attract stigma and discrimination, HIV/AIDS is particularly open to generate responses which 'discredit'[14] those who are infected. This is both because the routes of HIV transmission include sexual behaviour and the sharing of injecting equipment by drugs users—behaviours that are considered shameful or illegal in many societies—and because many of the groups that have been most affected are already marginalised and stigmatised within society. This stigma has been compounded by fear due to lack of knowledge within South Asian societies about the modes of HIV transmission.

**Box 4.3**

## Stigma and discrimination in South Asia: an illustrative study

A UNDP study, in partnership with five NGOs, conducted a survey using a generic rapid research methodology, to identify and measure the components that influence HIV-related stigma, discrimination and preparedness to adequately care for HIV positive patients within hospitals in Bangladesh, India, Nepal, Pakistan and Sri Lanka.

Research was undertaken in one private and two public hospitals in each of five cities (Colombo, Delhi, Dhaka, Karachi, and Kathmandu). The 1200 respondents were drawn from four staff groups within each hospital: doctors, nurses, ward assistants and laboratory technicians. The results produced a number of scales that appear to be key components of stigma and discrimination and reveal great differences in the level and make up of stigma and discrimination within different hospital settings and among different levels of hospital staff.

The study highlighted the close relationship between stigmatising attitudes and discriminatory practices on the one hand and levels of knowledge, awareness and professional experience of HIV among hospital staff on the other. These attitudes and practices have profound implications for the quality of healthcare that HIV positive patients receive. Most medical staff are bound by codes of ethics that are designed to ensure that all patients are treated equally. Yet, in the face of an infectious disease, the staff's concern for their own safety can combine with limited knowledge and experience of HIV to lead to stigmatising attitudes and discriminatory practices within hospitals. Such stigmatising behaviour among hospital staff, especially in the beginning stages of an epidemic, mirrors the attitudes of society at large.

This preliminary study shows that it is both possible and necessary to measure and disaggregate HIV-related stigma and discrimination. The results indicate that the major components of stigma and discrimination towards PLWHA in hospital settings are ignorance about HIV transmission and fear of the consequences of infection. Further research is needed to understand the implications of stigma and discrimination in the South Asian context and design interventions to reduce such attitudes.

It needs to be noted, however, that the study does not imply an across-the-board, sweeping indictment of the health system in South Asia. It recognises that health service providers work under difficult conditions and their attitudes and behaviour would reflect that of society in general. It is also true that stigmatising behaviour is not unique to the region.

*Source:* Extract from Nath, 2000

This lack of knowledge is evident even among policymakers and healthcare workers who have often applied unnecessary and restrictive measures to PLWHA, thereby fuelling the misconceptions, fear and stigma relating to the disease as well as violating individual rights.

HIV-related stigma is built upon, and serves to strengthen and legitimise, existing social inequalities. The power imbalances and socio-economic and gender inequalities within South Asian societies combine with taboos around sexuality, fear and ignorance about HIV transmission, and inappropriate media reports, to create a powerful stigma attached to HIV/AIDS. Marginalised groups are also stigmatised partly because there is little general understanding of the structural factors that make them vulnerable to HIV. Therefore, better understanding of the development aspects of HIV would help reduce stigma surrounding them.

Throughout the region, PLWHA have experienced violent attacks, refusal of medical treatment, rejection from families, communities and from the workplace, denial of last rites and many other rights violations. In Bangladesh, there have been cases of PLWHA being held in police custody,[15] while in India a Supreme Court judgement had

**Box 4.4 The three phases of the AIDS epidemic**

There are three phases to the AIDS epidemic in any society.

The ***first*** is the epidemic of HIV infection (entering the community silently and unnoticed).

***Second*** is the epidemic of AIDS, which appears when HIV triggers life-threatening infection.

***Third*** is the epidemic of stigma, discrimination, blame and collective denial, which makes it so difficult to effectively tackle the first two.

*Jonathan Mann, the late director of the Global Programme on AIDS, 1987*

'suspended' HIV-positive people's right to marry in 1998, though that right has now been restored.[16] This is happening despite the UN Commission on Human Rights clearly stating: "Discrimination on the basis of HIV or AIDS status, actual or presumed, is prohibited by existing international human rights standards, and the term, 'or other status' in non-discrimination provisions in international human rights texts should be interpreted to cover health status, including HIV/AIDS".[17]

A recent study of the attitudes and behaviour of health service providers indicates that stigma and discrimination pervades the hospital system as well (See Box 4.3).

The stigma and discrimination attached to HIV/AIDS also hampers prevention efforts, as people are less willing to test for HIV or to admit to their positive status. Many PLWHA, therefore, do not receive the support needed for behaviour change and are not involved in HIV-related responses. This also results in a lack of accurate information about levels of HIV prevalence, making informed preparation and responses impossible. Such denial and secrecy takes place not just at a personal, but also at a social level, with communities and nations across the region refusing to admit the scale of the problem.

## 4.3 Social Violence and Human Rights Violations

The active role of civil society, including that of local decision-policy-makers, in protecting the rights of individual community members is crucial in sustaining the socio-cultural fabric of any community. Given the existing environment of intolerance, stigma and discrimination, societal acceptance is particularly crucial for the effective implementation of HIV-related legislation. There is evidence within South Asia that human rights violations and violence against individuals (including those who have been traditionally marginalised, especially the poor and disempowered, women, those belonging to Scheduled Castes/Scheduled Tribes, religious minorities, migrants and stigmatised groups) are often aggravated within existing community structures.

Studies in South Asia reveal that more women die from violence-induced causes than from maternal mortality (the region has one of the world's highest rates of maternal mortality[18]). The lives of millions of women in this region are defined by traditions that enforce submission to men and endorse unequal treatment. In some countries, for example, it is reported that young girls and women are sometimes killed by their relatives even if they are raped, as they are blamed for bringing dishonour to the family.[19] Women from Bangladesh who have been in the sex trade also fear being killed by their families. Apart from traditional mindset, another reason for such manifestations of violations is the lack of access that women have over

**Box 4.5** **Badi communities in Nepal: surviving social ostracism and violence**

Badis form a section of the 'untouchable' Hindu caste in Nepal. Badi women have traditionally sold sex, and 40 per cent of Badi households have at least one woman engaging in the sex trade, according to experts. An NGO, Social Awareness For Education (SAFE), has just started condom awareness and distribution among sex workers and their clients.

Over the past five years, registered local bodies of 'moral police' called Tol Sudhar Samiti (Neighbourhood Improvement Committee), usually comprising high caste men, have taken on a campaign to 'expel prostitution', which, in their view, was synonymous with the Badi community. One member of the campaign told *The Kathmandu Post* in April 2001, "When we found men in Badi women's houses, we beat them as would policemen, when arresting thieves." Similar disciplining of sex workers was done only by women activists.

Manju, a community mobiliser working for SAFE, remembers the terrifying night the Samiti broke into her house and beat her up because she had complained against their activities. She took refuge at the local police station. The next day, she found her house had been vandalised. Manju was forced to rent out her house and move to another neighbourhood. Nirmala, another Badi woman, recalls the time a group of Badi women were summoned to the police station for a discussion. "There was no discussion," she says. "They intended to blacken our faces and parade us around town with placards reading, 'I am a whore'."

Protesting such forms of socially sanctioned violations, Badi women from several districts took out a silent procession in December 2000 to highlight the violence directed at them.

*Source:* Based on reports in *Los Angeles Times*, August 3, 1994, John-Thor Dahlburg, Times Staff Writer; *Nepali Times*, July 5-11, 2002, Number 101

familial assets, exacerbating socio-economic insecurities. Since young women and girls lack education, there are limited livelihood opportunities available to them, especially since the existing social support mechanism around them is inadequate. Such skewed socio-cultural realities and trends seriously challenge the right to development for many, besides infringing their basic human rights. Women living in these insecure conditions are vulnerable to trafficking and sexual violence and, therefore, to HIV.

Gender inequities and stereotypes in South Asia increase the vulnerability of young women, and to a lesser extent young men, to HIV and create an environment in which it is easy for HIV to spread.[20] The taboos around the open discussion of sex and the social value that is placed on the ignorance of women and girls with regards to sexuality, safer sex and relationships creates a situation in which women and girls engage in sexual relationships without the basic information, resources, confidence and skills needed to protect themselves from HIV.

The strong pressure on women and men to conform to widely held gender ideals creates a situation in which it is often socially unacceptable for both women and men to seek information on sex that would empower them to protect themselves from HIV. For women, ignorance of sexual matters is valued as a sign of 'purity' and 'innocence', while knowledge about sex is seen as a sign of 'immorality', making it difficult for them to seek information on sexual matters. Men, on the other hand, are expected to conform to a masculine ideal which values sexual knowledge and experience with a variety of partners, often making it hard for them to admit ignorance on sexual matters and seek information and support.

In addition to the existing cultural value placed on sexual inexperience in women, it has been seen that the HIV epidemic can prompt older men to seek ever younger partners who they believe will be less sexually experienced and therefore less likely to be infected by HIV.[21] This makes young women more vulnerable to being infected by older men with wider sexual experience.[22]

### 4.3.1 Sexuality and vulnerabilities: men who have sex with men

Sex between men is common within South Asia, as it is in other societies. However, such sex is generally not viewed as 'homosexual' and those men engaging in it are rarely part of any 'gay' community.[23] Moreover, such activities are taboo and not widely talked about, and are also officially outlawed in most South Asian countries, often by old British colonial laws that have been left in place. Despite this, it appears that in many countries young men have their early sexual experiences with other young men and that many go on to continued bisexual activity in later life. For example, 50 per cent of male university students interviewed in Sri Lanka reported that their first sexual experience had been with another man.[24] While male bisexuality cannot be understood simply as a response to men's lack of access to women, it is likely that restrictions on contact between men and women in many South Asian cultures do play a part in the widespread nature of sex between men as an alternative means of sexual expression.

*Although male sex workers are often more aware of their vulnerabilities to HIV and STIs than their peers, the fact that they are an extremely marginalised group... makes it extremely difficult for them to protect themselves.*

A study conducted in the Bangladeshi capital of Dhaka[25] found that the rights of men who have sex with men, including male sex workers, were being violated with increasing frequency. The study went on to establish that such violations affected their self-esteem, negotiating power, and ultimately increased their vulnerability to HIV/AIDS. For men, selling sex is both highly stigmatised and illegal in most of South Asia. Although male sex workers are often more aware of their vulnerabilities to HIV and STIs than their peers, the fact that they are an extremely marginalised group, and are forced to operate in circumstances over which they have very little control, makes it extremely difficult for them to protect themselves. It is particularly difficult for young men to negotiate safer sex with older and more powerful male partners, and when anal sex is practised, the unavailability of condoms and lubricants can exacerbate the vulnerabilities that they face.

### 4.3.2 Mobile populations

Migration is a survival strategy for many individuals in search of work within South Asia. The region is currently undergoing major macro economic changes as part of the process of globalisation, which has opened up many avenues for large-scale labour mobility. Poverty, absence of adequate or appropriate livelihood options, depleting rural employment opportunities, caste and gender-based exploitation and oppression, violence and conflict, the hope of finding better opportunities elsewhere and the search for a better life are among the key factors that make people move in search of livelihoods. Migration patterns from the region include internal and inter-country mobility, as well as overseas migration. The migration trends depend upon socio-economic and geographical factors as well as tradition/past migration experiences in the source community, availability of local livelihood options and proximity to metropolitan cities.

According to figures from the Bureau of Manpower and Employment and Training of Bangladesh, the average

number of documented migrant workers, both skilled and unskilled, is about 200,000 per year. In India, according to the National Sample Survey (1993), 24.68 per cent of the population—approximately 200 million people—were recorded as having migrated, either within India, to neighbouring countries or overseas. Recent studies have estimated the annual flow of workers overseas to be well over 100,000, 80 per cent of them from the unskilled sector. Nepal's Department of Labour has registered 52,170 overseas migrant workers, and this figure does not include the vast numbers crossing the open border into India, for which estimates are as high as one million. Figures provided by the Bureau of Emigration and Overseas Employment of Pakistan for 1999 show 2,790,221 migrant workers working abroad. Its major cities house vast migrant populations both from within Pakistan and outside. Roughly 20 per cent of the population of Karachi consists of individuals who have come from other provinces or are migrants from Afghanistan, Bangladesh, Myanmar, Philippines and the Central Asian states. The total number of Sri Lankans abroad is estimated to be around 788,000, of whom 90 per cent are in West Asia, including Saudi Arabia, Kuwait and the United Arab Emirates. In 1999 alone, almost 180,000 people are recorded as having left Sri Lanka for employment abroad, out of which 64.5 per cent were females. Besides official data on number of departures and arrivals at ports of entry, there is substantial movement by people unofficially, by refugees, immigrants and temporary residents.

A factor that significantly influences the decisions of potential migrants is the narrative of returning migrants, who, in their desire to create a favourable impression, highlight monetary gains and underplay or gloss over experiences of exploitation and abuse. The decision to migrate, therefore, is often based on little more than an ill-defined impression that life will offer more elsewhere, with very little information about the ground realities.

Migrants contribute to the development of local economies in both the source and destination countries. Earnings from work abroad are a vital source of income for migrants' families back home. In many cases, the remittances from foreign migrant workers are one of the main sources of foreign exchange for countries in the region. In Sri Lanka, for example, such remittances form the bulk of foreign exchange earnings.[26] In Pakistan, remittances in 1993 were estimated to be 44 per cent of the total earnings from exports. In Bangladesh, foreign employment is the second highest source of foreign exchange earnings after garment exports. Migrant workers are a source of cheap labour in destination countries, since many of them work for lower wages than the resident workers.

*A large number (of migrants) have to cope with insecurities in their jobs, unsteady incomes, cultural alienation, lack of access to social support systems and social capital and loneliness.*

It is, however, paradoxical that in spite of this, a majority of these migrants are poor, do not have access to health services and are exploited and neglected. They reside in squatter settlements and urban slums and are employed in the informal sector. Being 'foreign workers', they are often not covered by the same legal protections as their local counterparts, and are generally unaware of their rights as workers. A large number among them have to cope with insecurities in their jobs, unsteady incomes, cultural alienation, lack of access to social support systems and social capital and loneliness. It is these very challenges that make migrants more vulnerable to HIV infection.

However, attempts to establish intuitive links between mobility and HIV/AIDS

have often resulted in stigmatisation of migrants as well as restrictions on them, including forced testing for HIV and deportation of those found positive and limitations on the rights of women to move in some countries. The inhumane and exploitative conditions that most migrants face in source areas, during transit and within host communities in destination countries need to be changed and a comprehensive response needs to be developed to facilitate safe migration, thereby reducing HIV/AIDS related vulnerabilities.

*It must be stressed that migrants are neither 'carriers' of the virus nor are they responsible for the spread of the epidemic.*

It must be stressed that migrants are neither 'carriers' of the virus nor are they responsible for the spread of the epidemic. They are often unaware of whether they have been exposed to HIV and of the potential harm this poses to their spouse and unborn children. Most of those returning home because of illness arising from various opportunistic infections are not aware that HIV is the cause of their poor health. Many, especially those in West Asia, are deported without explanation if found to be HIV positive. In the rare cases where they may have knowledge about their HIV status, the climate of stigma and discrimination makes them reluctant to disclose their status within their communities and even families. Importantly, the female spouses/partners of male migrants are further disadvantaged because existing asymmetrical power and gender equations make it difficult for them to protect themselves against HIV infection.

### Vulnerability of women migrants

The gender dimension of migration-related vulnerability presents a complex picture. The number of women migrating is increasing within South Asia. Globally, the percentage share of female labour in the total agricultural labour force is reported to have increased from 44 per cent to 48 per cent within the last 50 years, in spite of the share of agricultural labour within the total labour force declining by over 20 per cent within the same time period.[27] Such gender-specific trends also give rise to particular migratory patterns, leading to what may be termed the 'feminisation of migration' across the region.

For many women, migration—in addition to being a livelihood strategy—is also an escape route from limitations imposed by traditional societies, oppressive laws and abuse or violence. A study in Bangladesh has shown that families tend to urge women to migrate when they are perceived as being a burden to the family.[28] There are also higher expectations from women to send back remittances, compared to young men.

The circumstances of such migration processes, coupled with the limited preparedness, may create conditions that lead to women—especially young girls—being lured with false promises of employment and marriage and being trafficked into the sex trade, slavery and exploitation. Gender biases limit the access of women migrants to information and services that could make their movement safer. These women also lack support mechanisms within their source-communities, thus confining their knowledge to hearsay. All these factors exacerbate women's vulnerability to HIV.

Women migrants are often victims of violence and harassment. Reports of sexual assault by employers and others are common both within the region and overseas, and legal redress is rarely available or availed of. Further, pressure from the family to send more money may often lead women migrants to supplement their earnings through sex work. In all of these situations, the ability of women to

negotiate safer sex remains low, even if they are aware that they might be exposed to HIV. Contrary to popular belief, the vulnerability to HIV remains high for those migrating with families as well. When men migrate in search of work, women left behind are often exploited including sexually. As sole caretakers of the children and family they are especially vulnerable as the expected incomes from male migrants are often unstable or inadequate.

Apart from women who move, even those whose partners move, leaving them behind, are vulnerable to HIV/AIDS to the extent that they are vulnerable to exploitation and denial of rights. Their lower position in society and their limited control over their lives heighten their vulnerability to sexual exploitation, particularly when debts have been incurred for covering migration costs and remittances fail to come. Where women move alone, leaving their spouse and children behind, the men are often involved in multi-partner sexual relationships and girl children are known to become exposed to situations of sexual exploitation, abuse, rape and incest.

The region has several examples of effective responses aimed at reducing the vulnerability of migrant populations. Formal pre-departure trainings in Sri Lanka, initiatives for interactions between returnee migrants and out-going migrants in Bangladesh, multi-sectoral responses to address the broad spectrum of needs of migrants in selected source areas in Nepal and India are some examples. However, there is need for concerted and more comprehensive responses. All efforts to reduce the HIV vulnerabilities associated with mobility need to address the broader issues of poverty, livelihoods, education, access to information and services and the need for a rights-sensitive legal environment. Effective responses would necessarily reflect the voices of migrants and their needs and would involve returnee migrants, spouses, youth, key enforcement personnel, recruiting agencies and PLWHA, addressing vulnerabilities at source, during transit and in destination countries. Most importantly, all efforts to reduce the vulnerability of migrant populations must be careful not to stigmatise the migrants or their families and communities.

### 4.3.3 Trafficked women and girls

For a large number of people in the region, migration has become a key survival strategy. However, the lack of safe, secure and legal channels for migration drive unsuspecting and uninformed women and girls into the hands of unscrupulous agents and traffickers who promise them 'good jobs' and 'safe travel' into sites of work. These are usually young men, themselves from poor families, who are lured into the trafficking networks in order to support their own families.

*When men migrate in search of work, women left behind are often exploited including sexually.*

Because trafficking is an illegal and concealed activity, it is difficult to be precise about the exact numbers of women and children involved. Estimates are based on the reports of law enforcement agencies, researchers and groups working with survivors and communities, and indicate that hundreds of thousands of women and children have been or are vulnerable to being trafficked from South Asia. Sources estimate that 10,000-20,000 women and children are trafficked from Bangladesh every year.[29] NGOs have estimated that 5,000-7,000 girls from Nepal are annually trafficked into Indian brothels.[30]

The factors contributing to an increase in the trafficking of women are as follows:

- increased demand and supply of trafficked persons;

- professionalisation of the traffickers and syndicates;
- modern transport, technology and the Internet;
- the growth of sex tourism;
- the feminisation of poverty;
- trading in human organs;
- the changing nature of sex work; and
- the erosion of social capital.

The all-pervasive neglect, discrimination and sexual abuse of women and girls in the region are responsible for their increased vulnerability to being trafficked, and to HIV/AIDS. Research shows that women and girls often end up bearing the triple burden of exploitation – they are poor, they form a marginalised group and they are women.[31] HIV prevalence rates has been estimated to be as high as 60 per cent in the brothels of Mumbai, India, where condom usage is very low.[32] It is extremely difficult for sex workers who are HIV positive to get medical treatment, and once found to be HIV positive, or too sick to receive customers, they are thrown out of the brothels. This often forces them into informal and unsafe sex work for survival.

*It is extremely difficult for sex workers who are HIV positive to get medical treatment, and once found to be HIV positive, or too sick to receive customers, they are thrown out of the brothels.*

Significantly, the region is witnessing a dangerous trend of younger girls being trafficked increasingly to satisfy consumer demand. According to the Coalition Against Trafficking in Women (CATW), the average age of girls trafficked from Nepal into India has fallen over the past decade from 14–16 years to 10–14 years. One common myth fuelling the demand for young girls in South Asia and West Asia is that sex with a virgin girl can cure STIs and HIV/AIDS. This means that the youngest girls, biologically the most vulnerable to HIV infection, are especially sought out for unprotected sex by the men most likely to infect them.

Women in Afghanistan have endured a particularly difficult environment, having been, until recently, denied even the most basic rights, including employment and education. The female literacy rate is one of the world's lowest—15 per cent in 1995.[33] Decades of political and civil unrest and conflict had heightened their vulnerability to violence. Emerging information, reported, for example, by Amnesty International, indicates that Afghan women and girls had been treated as the spoils of war, and were being systematically kidnapped and raped by fighters.

Orphans, women with disabilities, and widows, who are often very young, have been noted as being particularly vulnerable. Poor widowed women with little or no financial support or means of earning a livelihood are forced to resort to beggary to feed their children, thus getting exposed to abuse, including sexual abuse. In an atmosphere of silence and taboos about sex, this only heightens the vulnerability of women and girls to HIV/AIDS. Furthermore, there are reports of rising levels of drug use among displaced Afghan men, unsafe sexual relationships, and the migration of male refugees to metropolitan centres, such as Karachi in Pakistan to find work. Many of these men are uninformed about safe sex practices and are themselves vulnerable to HIV/AIDS. On their return, they increase the vulnerability of their wives/female partners to HIV/AIDS.

Trafficking and HIV/AIDS are presenting serious threats to the health, dignity and lives of young women and girls across the region. The nexus of poverty, HIV and the marketing of youth within and across borders is creating ever-widening circles of desperate insecurity and disproportionately threatens the lives of young girls, making poor people poorer through sickness, loss of livelihoods and rejection by society. The epidemic is severely

**Box 4.6**

### India addresses the problem of trafficking of women

In the course of discussions on the advancement of women at the 57th UN General Assembly in October 2002, the government of India affirmed its commitment towards the empowerment of women, referring to the National Policy for the Empowerment of Women (2001). S.S. Ahluwalia, Member of Parliament and member of the Indian delegation said that the Immoral Traffic (Prevention) Act of 1956 (ITPA), supplemented by the Indian Penal Code, prohibits trafficking in human beings. He also said several other plans, programmes and measures are in place to deal with the serious issue of trafficking. The National Commission for Women, a statutory body, has been performing crucial sensitisation functions in this and other areas. At the regional level, he pointed out, the SAARC states finalised the Convention on Trafficking recognising this as a priority area of action. The Protocol on Trafficking in Persons, especially women and children, of the UN Convention against Transnational Organised Crime is expected to reinforce national efforts to address this problem.

*Source:* Statement by Hon'ble Mr. S.S Ahluwalia, M.P and Member of the Indian Delegation, Third Committee, 57th UN General Assembly, New York, 10 October 2002

undermining human security and human rights, destroying the lives of individuals and families and posing a serious threat to the social capital and the overall development of the region.

Trafficked persons in South Asia are often discriminated against even by their own communities, once they return or are repatriated from destination countries. The process of re-integration for trafficked survivors is an uphill task, since their communities ostracise them. This is even more pronounced in the case of trafficked survivors who are HIV-positive. Studies in Nepal have documented that HIV positive survivors of trafficking are often stigmatised and find it impossible to re-integrate themselves into their communities.[34]

Urgent and integrated action at the national and regional levels is required to address the multiple and complex ways in which the security and rights of young girls are threatened. The integral connection between HIV/AIDS, gender and trafficking through the nexus of vulnerability and sexual violence, can be summed up as follows:

- the factors, which determine the context of trafficking, are also the factors, which are associated with the increased vulnerability of women and girls to HIV/AIDS. Specifically, these relate to gender-related social and economic disempowerment, lack of social capital formation and unequal access to all the indicators of development, including health, information and education. Such circumstances severely undermine the basic rights to social protection and the right to the highest attainable standard of living;[35]
- trafficking is part of a pattern of migration within and across countries, which removes persons from the protection of their communities and severs them from their systems of social support. These very factors are recognised as causes fuelling the continued spread of the HIV epidemic, and which, in turn, violate a person's right to a standard of living adequate for the health and wellbeing of oneself and one's family;
- those caught in the web of trafficking face an increased vulnerability to HIV/AIDS on account of their inability to control their working and living conditions, including sexual relations, as well as their inability to come out of it. Such situations grossly violate a

person's right to freedom from slavery or servitude and the right to physical integrity (security of person); and

- common societal responses to those affected by HIV/AIDS as well as trafficking are strongly influenced by stigmatisation, discrimination and further marginalisation. These responses, in turn, undermine the basic rights and freedoms of these affected individuals, including the right to mobility and residence, the right to essential services, right to confidentiality, right to free association, and sexual and reproductive rights.

## 4.4 The Scope of Human Rights

It is important to briefly explain the legal frameworks within which most PLWHA in South Asia live. As mentioned in Chapter 3, some of the fundamental human rights are covered under several of South Asia's national constitutions, although the scope of these rights varies from country to country, as does their application in the context of PLWHA. Nations who are signatories to international documents/agreements/conventions (such as the Universal Declaration of Human Rights) are bound by the standards laid down therein, depending on the binding nature of the document and the manner in which each country codifies it within its national laws.

Very few nations in the world—and none in South Asia—have specific statutory laws governing HIV/AIDS or ensuring protections to PLWHA. Fundamental rights guaranteed by national constitutions are, therefore, the prime source of law in South Asia. However, there are also customary and personal laws, particularly in South Asia, that determine the rights of individuals, especially women.

Apart from constitutional guarantees, policies and guidelines on HIV/AIDS drawn up by national governments often become the prime basis on which the rights of PLWHA are defined. However, in India, governmental policies/guidelines cannot be enforced by the courts, though many rights of PLWHA are defined through court judgments as India is governed by the system of English common law.[36]

Recently, widely published cases of law enforcement interventions involving harassment of vulnerable group outreach workers created an uproar within civil

**Box 4.7**

### Mandatory testing

*India*: Under India's Immoral Traffic (Prevention) Act, 1956 (ITPA), the sex trade itself is not considered an illegal activity, although brothel keeping and soliciting in public places are. Presently, there is a Bill pending before the Parliament in India to amend ITPA. The Bill provides for the rehabilitation of sex workers. However, it also contains provisions for mandatory testing of sex workers for STDs and HIV. In addition, Section 8 stipulates that the government shall set up special cells in the health administration to organise mandatory health check ups on women in the sex trade. This is contrary to the testing policy of India's NACO, which encourages voluntary and informed testing.

*Bangladesh:* The 1995 National Policy on HIV/AIDS and STD Related Issues espouses a rights-based approach and endorses the Universal Declaration of Human Rights as a benchmark for policy making and action at all levels in the response to HIV/AIDS and STDs. However, the policy makes it mandatory for private and public sector healthcare institutions, employment clinics and the armed forces services to notify the Directorate General Health Services about all people living with HIV/AIDS (PLWHA) and provide case details. At the same time, the policy maintains that notification must be anonymous and confidentiality must be maintained at all points.

Table 4.2

**Important human and legal rights and their implementation**

| Population cohorts<br>People Living with HIV/AIDS (PLWHA) | Human rights<br>Overview of laws and their implementation in South Asia |
|---|---|
| • The right to life–treatment and healthcare, employment, confidentiality and privacy, protection from violence, form groups and associations<br>• The right to equality and non-discrimination–in healthcare, employment, insurance, travel and movement, services, marriage and family<br>• The right to information–on treatment, safer sex options, harm reduction methods<br>• The right to privacy and confidentiality–in healthcare, employment, legal/ judicial systems<br>• The right to bodily integrity and autonomy–consent in treatment and testing<br>• The right to health–access to the best available medication at affordable prices<br>• The right to reproductive choices and decision making–continuing or terminating pregnancy, decision about fertility (in the context of sterilisation that HIV-positive women are subjected to without consent) | There are no specific legislation in the region either protecting or infringing upon the rights of PLWHA. However, many constitutions provide certain fundamental rights including the right to equality and non-discrimination, right to life and liberty as well as privacy,[37] which are pertinent in the context of HIV/AIDS. Though there is lack of protective legislation, many national strategies state that PLWHA are entitled to fundamental human rights and freedom, including the right to confidentiality as part of the right to privacy. In Nepal this right is considered inviolable except as provided by law.[38] Public health institutions in some countries are obligated not to discriminate between patients on the basis of HIV status and to provide treatment for opportunistic infections. Despite such guarantees, discrimination of PLWHA in healthcare settings is not an uncommon experience. Breach of confidentiality about HIV status is another significant issue in the context of healthcare settings. Inability to access services due to fear of stigma and discrimination is a significant concern for PLWHA in this regard. There are several examples in the region of people having lost their jobs because they tested HIV positive In Maldives, administrative measures saying that there should be no discrimination against PLWHA with regard to employment applies only to those in civil service and government-owned companies.[39] PLWHA are also systematically denied insurance, as insurance schemes in general exclude liability for HIV-related expenses. |
| **Injecting drug users** | **Overview of laws and their implementation in South Asia** |
| • The right to life–civil rights against arbitrary arrest and harassment by law enforcement and others, reintegration/rehabilitation<br>• The right to health–information, treatment, non-discrimination in healthcare, access to harm reduction strategies (clean needles, syringes and paraphernalia) | Various drugs such as opium and cannabis have traditionally been eaten, drunk or smoked in most countries of the region.[40] Following the introduction of heroin, however, injecting drug use is now common. The prevalence of injecting drug use varies considerably within and between countries, from very low levels estimated in Afghanistan to up to 93 per cent in some places in Bangladesh. Most of the South Asian countries are signatories to the Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988 and the Single Convention on Narcotic Drugs, 1961. There is also a SAARC Convention on Narcotic Drugs and Psychotropic Substances |

| | |
|---|---|
| • Decriminalisation of drug use and reform of related laws used to exploit IDUs<br>• The right to equality and non-discrimination–to services including healthcare | signed in 1998. The countries have implemented laws that criminalise drug use, the cultivation of opium poppy and cannabis; production, processing, buying, selling, trading, keeping and trafficking of drugs. The penalty for violation of laws related to drugs can vary from various lengths of imprisonment to death sentence in several counties, including Sri Lanka and India. Laws for the treatment and rehabilitation of drug users have mainly been adopted as part of punitive measures in Afghanistan[41] for policing the use and possession of drugs. There are reports that due to lack of treatment facilities in Nepal, a large number of drug users have been rounded up and put in prison where the 'cold turkey'[42] method of treatment is followed. Injecting drug users are being arrested throughout the region for carrying needles and syringes[43] and most legislation does not provide space for the implementation of harm reduction programmes. Needle exchange programmes have been introduced and are funded by some governments, such as that of the state of Manipur in India, Iran and Nepal. However, legally, such initiatives may amount to abetment of offences under the drug laws of the country. In most of the countries in the region, offenders of drug laws make up a very substantial part of prison populations. |
| **Sex workers** | **Overview of laws and their implementation in South Asia** |
| • The right to life–civil rights against arbitrary arrest and harassment by law enforcement agencies and others, right to form groups and associations, right to assemble<br>• Freedom of speech and expression–to publish educational and information materials<br>• The right to health–information, treatment, non-discrimination in healthcare, access to harm reduction strategies (condom distribution, safer sex, educative materials)<br>• Decriminalisation of homosexual intercourse and reform in related laws used to exploit men who have sex with men<br>• The right to equality and non-discrimination to services including healthcare, protection from obscenity laws | Even though the awareness of HIV/AIDS among sex workers is relatively high in countries of the region, condom use remains low. Legal evictions of sex workers within many countries in South Asia have intensified feelings of mistrust and harassment between sex workers and law enforcement officials. While sex work is not a crime in itself in many of the countries, brothel and street-based sex work is illegal. Iran is an exception, where execution (by firing squad or stoning) is the maximum penalty for sex workers and such executions are common.[44] |

society in India.[45] Implementation of interventions gets delayed in such a non-enabling environment and lives are lost. The published cases reveal that national guidelines clash with legislation and law enforcers' instructions. For instance, criminal laws affecting vulnerable populations have impeded sexual health interventions among them. Harm reduction methods like condom distribution and needle exchange programmes could be, and have been, seen as abetting crimes (homosexual sex, sex work, drug use). As a result, their effective implementation has been impossible in many countries.

Clearly, clarification, understanding and sensitisation of the particularities of the HIV/AIDS response is needed within law enforcement agencies at first, but also in the judicial administration and the legislature. There has been some interesting development in this regard in India. (see Box 4.8)

### 4.4.1 Judicial issues

Apart from the United States and Australia, the highest number of HIV/AIDS-related litigation has perhaps taken place in India. In 1997, the Lawyers' Collective challenged the termination of the services of a worker on the ground of being HIV-positive though the person was otherwise functionally healthy. In a landmark judgement of the Mumbai High Court, the worker was reinstated and paid back wages. More importantly, the Collective was able to obtain an order of suppression of identity because of which the HIV-positive person could sue under a pseudonym.

A study of 130 cases handled by the Lawyers' Collective between 1998 and 2001 found that the most important legal issue for men related to employment. In the case of women, the major problem related to maintenance, custody of children and property rights (such as matrimonial or joint property rights).[48] An increase in the number of divorce cases was also noted. It has been suggested that women remain vulnerable within the institution of marriage due to the unjust gender construction of sexuality in various Indian laws.[49]

Many of the South Asian countries have undertaken several measures to reform the legal climate surrounding HIV/AIDS. Some of them are:

- organising and training a nation-wide network of lawyers to handle individual complaints;
- providing free legal services;

**Box 4.8**

**Indian courts exhibit sensitivity towards PLWHA**

There are several cases related to HIV/AIDS pending in Indian courts[46] and the courts are exhibiting a certain sensitivity to the need for PLWHA to maintain confidentiality. In many cases, they have passed orders of 'suppression of identity' so as to enable the concerned persons to take recourse to the legal system without fear of being identified and stigmatised. In cases of suppression of identity, the petition or suit is filed in the full name of the PLWHA. After the pseudonym orders are passed, the papers with the full name are kept in a sealed cover in the exclusive custody of the registrar of the court while the court files are substituted by the pseudonym. Any interim order or the final judgment of the court is issued under the pseudonym.

In November 2002, the Delhi High Court issued notices to both the Union government and the Delhi government seeking their replies on the refusal of several city hospitals to treat an HIV-positive person. Notices were also issued to several hospitals where the person had gone for treatment, only to be turned away.[47]

- organising workshops to formulate policies for the protection of the rights of PLWHA and their families; and
- campaigning for the decriminalisation of homosexuality and sex work and for the formulation of laws covering issues such as HIV testing, confidentiality of HIV test results and discrimination against people with HIV.[50]

Sex workers have used legal redress and access to the justice system to address rights violation, as happened in Bangladesh (see Box 4.9).

### 4.4.2 Legislative reforms

The need for legislative reforms has been underlined at regional workshops on HIV law, ethics and human rights organised in the early and mid-1990s by the UNDP Regional Project on Strengthening Responses to the HIV Epidemic in Asia and the Pacific.[51] The issue still remains to be adequately addressed by most countries.

In most countries of the region, doctors who wish to prescribe ARVs to survivors of rape find themselves torn between government policy and medical ethics. These drugs are used as 'Post Exposure Prophylaxis' (PEP) for occupational exposure[52] and to reduce mother-to-child transmission of HIV. It has been contended that they should also prove effective for rape survivors.[53] However, many countries limit the use of PEP to occupational exposure and not to rape. This violates the rights of persons surviving sexual violence, compromises their treatment and care and infringes upon doctors' ethical duties. Moreover, even in countries that have policies for PEP provisions in occupational exposure, there is limited knowledge about such provisions, reducing their operational efficacy.

**Box 4.9** **Sex workers in Bangladesh: human rights violations and legal redress**

Tanbazar is a red-light area in the Bangladeshi river port town of Narayanganj, 25 km south of the capital city of Dhaka. Nearly 30 per cent of all the brothel-based sex workers in Bangladesh live in this area and it is home to more than 1,600 sex workers and their children. It is said that the earnings from brothels support not only other commercial activities within the brothel (shops, etc.) but also extended families of the sex workers. In July 1999, local officials evicted numerous sex workers from the brothels in Tanbazar. A brothel in the western town of Magura was home to 400 women and 50 of their children until it was also closed down.

The sex workers sought compensation and took to the streets of Dhaka in protest, carrying their children and placards reading "Rehabilitate us or give back our house". The sex workers said that they had been forced to live on the street or in parks. "We staged this demonstration after failing to get any help from authorities," said Momtaz Begum, President of the Sex Workers' Network of Bangladesh. She alleged that the sex workers were evicted even though they were operating legally and paid taxes on the brothel property. One of sex workers said that they were forced to pay protection money to the police and local thugs. "They used to get money from us on a regular basis besides having free sex. Now they are trying to throw us out and make our lives uncertain," said Sathi, a sex worker.

HIV prevalence rate in the brothel area is estimated to be 15 per 1000 persons, and the syphilis prevalence rate is about 50 per cent. Experts, therefore, feared that the scattering of these workers would deprive them from accessing available social and health resources and would thus make them vulnerable to HIV.

In a landmark judgement in March 2000, after a case was filed by over 100 sex workers and human rights organisations, the Bangladesh High Court ruled that the eviction of sex workers was unlawful and they had the right to make a living in this trade.

*Source:* Based on reports featured in the *Daily Star*, Bangladesh, July-August 1999 and BBC News, March-July 2000

Reforms concerning gender equality and the empowerment of women do not always receive the much-needed support in male-dominated legislative assemblies. Entrenched conservative attitudes in most countries in the region renders the liberalisation of laws relating to homosexuality difficult. Laws concerning sex work, the availability of condoms in prisons and needle exchange programmes are also treated as being far too controversial by legislators, who prefer to support only what are perceived as 'safe' and conservative measures.

One issue that has dominated the law reform scene in India and Sri Lanka is the proposed repeal of the provision in the respective penal codes making it an offence to engage in "carnal intercourse against the order of nature with any man, woman or animal". This section applies to homosexual as well as heterosexual oral and anal sex, with consent not seen a valid excuse.[54] In 1995, Sri Lanka amended certain sections of the Penal Code and the repeal of the provision dealing with homosexual acts was recommended.[55] In passing the amendment, however, the legislature not only decided to retain the section making homosexuality an offence but widened its scope to cover sexual relations between females by replacing the word "males" with "persons". Such incidences have led to greater harassment of sexual minorities.

## 4.5 Access to Treatment, Care and Support

A crucial aspect of the human rights of PLWHA is their access to treatment. Denial or lack of such access amounts to a violation of the basic human right to life.

The last decade has witnessed a number of significant advances in the understanding of the HIV infection and how it can lead to AIDS. These advances have led to the development of a range of potent drugs to control HIV infection (see Box 4.10). Both these developments have substantially altered the way in which HIV/AIDS is regarded and treated. The fatal course of HIV infection can now be altered to a chronic manageable condition that allows a person living with HIV to lead a relatively normal life.

The drugs that control HIV infection, known as Anti-retroviral drugs (ARVs), are a recent phenomenon and have radically changed the HIV care landscape within a short span of a few years. A combination of three or more different ARVs in various regimens, that as a group are known as Highly Active Anti-Retroviral Therapy (HAART), form the staple of HIV treatment today in developed countries.[56]

*The drugs that control HIV infection, known as anti-retroviral drugs, are a recent phenomenon and have radically changed the HIV care landscape within a short span of a few years.*

HIV is one of the most rapidly mutating viruses and its immense capacity for genetic variation enables it to sometimes produce forms that are unresponsive to the drugs that interfere with viral replication. Treating HIV infection with a single ARV drug-monotherapy – quickly leads to drug resistance. The chances of drug resistance are also present in the case of dual therapy. The rule, therefore, is to provide for triple therapy or HAART, where the chances of drug resistance are greatly reduced. In the United States, the widespread use of HAART since 1996 has led to a 50 per cent decline in AIDS incidence, hospital admissions and related deaths.

### 4.5.1 HAART: availability and access

Developing countries are home to 95 per cent of PLWHA[57] and WHO estimates that 6 million people in these countries are in immediate need of HAART. However,

**Box 4.10**

## Vaccine development

Till May 2000, there had been over 60 Phase I/II clinical trials of at least 30 candidate HIV vaccines. These initial trials were designed to test the safety and immunogenicity of the candidate vaccines.

The National Institutes of Health (NIH), International AIDS Vaccine Initiative (IAVI) and the South African AIDS Vaccine Initiative (SAAVI) are some of the world's major researchers of the HIV vaccine. NACO, India, Indian Council of Medical Research and International AIDS Vaccine Initiative have initiated work to develop an indigenous vaccine relevant to sub strain C of HIV-1.

HIV vaccines present unique considerations for product and clinical development and careful planning is needed for their timely development. The important areas in this regard include product characterisation and manufacturing, anticipating the needs of future trials and accumulating sufficient safety, immunogenicity and efficacy data during clinical development.

Despite the urgent public health need, HIV vaccine research is at best a questionable financial investment. The scientific challenges are daunting, and the development timeline is lengthy, expensive and unsure. In addition, the vast majority of people who need an HIV vaccine live in resource-poor developing countries. This concern about the lack of a paying market in developing countries discourages private companies that fund HIV vaccine research from investing in research on products particularly suitable for lower-income countries.

It is likely that multiple large-scale trials of several HIV vaccines will be necessary before a highly effective product is identified. These trials will involve thousands of volunteers around the world over several years. Clinical trials of HIV vaccines raise important concerns about participant protections and research ethics.

Because HIV vaccines employing advanced technology may be expensive, compared with current vaccines, the severely limited healthcare resources in poorer countries is a major issue of concern. In addition, the inadequate healthcare infrastructures in many developing countries will render it difficult to distribute a vaccine. Besides, vaccination programmes will have to be adapted to reach the risk groups that need an HIV vaccine most urgently. Current immunisation programmes in developing countries focus on reaching children, but it is the sexually active adolescents and adults that will most immediately need a vaccine for HIV. Part of the challenge lies in addressing the reluctance on the part of many countries to acknowledge that young people are sexually active. The problem of reaching highly mobile or displaced populations will also have to be examined.

AIDSVAX (produced by VaxGen) is the only HIV/AIDS vaccine that has reached phase III clinical trials designed to determine actual preventive efficacy in human beings. The vaccine was reportedly 78.3 per cent effective in people of African origin and 68 per cent effective in Asians.

62 per cent or 500,000 of the 800,000 people estimated to be receiving HAART in 2001 live in developed countries. Only 230,000 people from developing countries were on HAART in 2002, with Brazil accounting for half this number. HAART reaches only 5 per cent of those who need it in the developing world (See Table 4.3). In December 2002, around 43,000 people in Asia were receiving HAART, barely 4 per cent of the estimated 1,000,000 who needed therapy. "These drugs have saved hundreds of thousands of lives in Europe and the United States. They could do the same for millions more in developing countries. If we can get cold Coca Cola and beer to every remote corner of Africa, it should not be impossible to do the same with drugs."[58]

### The feasibility of HAART in resource-limited settings

There are two perspectives on the issue of access to treatment–the instrumentalist perspective of the human capital approach and the human rights perspective of the human development approach. The human capital approach, with its focus on rates of return and affordability by individuals, is against public provisioning of HAART.

Table 4.3

**Coverage of anti-retroviral treatment in developing countries, December 2002**

*(Adults by region)*

| Region | Number of people on ART | Estimated need | Coverage (%) |
|---|---|---|---|
| Sub-Saharan Africa | 50,000 | 4,100,000 | 1 |
| Asia | 43,000 | 1,000,000 | 4 |
| North Africa, West Asia | 3,000 | 7,000 | 29 |
| Eastern Europe, Central Asia | 7,000 | 80,000 | 9 |
| Latin America, Caribbean | 196,000 | 370,000 | 53 |
| All regions | 300,000 | 5,500,000 | 5 |

*Source:* WHO/ITAC, 2002

This school argues that the efforts to step up access to treatment may dilute the focus on HIV prevention while the high costs of HAART may divert scarce resources away from HIV prevention efforts and other competing require-ments within the health sector. In other words, HIV prevention and health priorities such as gastro-enteritis, tuberculosis, malaria, malnutrition, and population control may merit greater consideration than the medication requirements of a smaller, albeit vocal, special 'interest group' of PLWHA and their advocates.

However, if public health action on HIV—especially the care and support regime—is perceived as being an example for other health challenges, then it would no longer be viable to see HIV/AIDS as a special interest of a few people. Instead, the approaches and lessons of the HIV/AIDS strategy would help augment the capabilities of the existing public health system at all levels. Indeed, it would be essential to strengthen the primary health centres and local hospitals even to meet the challenge of HIV at its present scale in South Asia, in addition to ongoing work of the NGOs, voluntary counselling and testing centres etc. In other words, the agenda for health sector reforms in South Asia would be greatly strengthened by mainstreaming HIV/AIDS. Therefore, there is no unavoidable trade-off between the provision of HAART and other health priorities.

The second argument of the human capital school is that HAART involves rather complex regimens of expensive drugs that have serious side effects. HAART, therefore, calls for additional investments in training medical personnel in the long term treatment, monitoring and care of PLWHA.

**Box 4.11**

### International Treatment Access Coalition

On 12 December 2002, an International Treatment Access Coalition (ITAC) of more than 50 partners was formed to overcome the challenges of expanding access to ARV drugs. The partners included NGOs, donors and governments, PLWHAs and their advocates, the private sector, academic and research institutions and international organisations. ITAC hopes to promote the efficient sharing of information and technical data about what works in successful programmes, assist the establishment of reliable drug procurement systems, and training healthcare workers. The group also aims to galvanise and coordinate donor action and provide much-needed technical assistance to national HIV treatment programmes. It will be served by a small secretariat at WHO's Headquarters in Geneva.

*Source:* ITAC
(http://www.itacoalition.org/content.html)

Moreover, HAART has to be taken on a fairly regular basis, life-long, implying regular treatment expenditures for several years. In addition, a person living with HIV has to spend on regular medical evaluation to monitor disease progression as well as on treatment for the management of the side effects of HAART.

In all the countries of South Asia, the cost of HAART is significantly higher than the average per capita income. Access to treatment is, thus, a luxury that most South Asian governments and the large majority of their PLWHA cannot afford. The high cost often results in frequent interruption of treatment, especially among the poorer patients and this could lead to drug resistance. Presently, the private sector is the only provider of anti-HIV treatments that include ARV drugs and, in certain cases, even little understood indigenous preparations. The haphazard provision of ARVs further underscores the urgency for governmental initiatives to standardise HAART, train the health sector—both public and private—and provide affordable treatment.

*The majority of the population, advocates of the human capital school argue, is not literate, and good health is not an immediate preoccupation of poor households.*

With South Asia bearing more than one-third of the world's TB burden, comprehensive national programmes based on the free distribution of anti-TB drugs have been in operation for several years. In recent times, TB control programmes have also absorbed the added cost of Directly Observed Treatment (DOT). The TB programmes in Bangladesh, Indonesia, Nepal and Myanmar have made considerable strides in achieving high rates of cure through DOT, thus providing the rationale for considering a similar approach in the case of HAART. Though there are few studies to demonstrate the feasibility of DOT for HAART, the approach can work among some groups such as sex workers or injecting drug users.

The human capital school also focuses on the difficulties in implementing initiatives that promote the use of HAART in a resource limited setting. The majority of the population, its advocates argue, is not literate, and good health is not an immediate pre-occupation of poor households. The problem is compounded when the intervention calls for complex patterns of healthcare, in terms of the timings and dosage of drugs, the need for ancillary services such as periodic medical review, counselling and the management of side-effects. The discrimination against PLWHA even by healthcare providers and the healthcare system in general can greatly complicate access to HAART.

This line of thinking can be countered, first, by the public obligation argument. PLWHA may be a small fraction of the total population in the region but, at 4.2 million, their numbers are still large and it would be a dereliction of duty not to address the treatment, care and support of such a large number of people. This argument could also be strengthened if the morbidity and the fatality associated with HIV/AIDS is taken into consideration. Approximately 1,000 people are estimated to die every day in the South and South East Asian region, a number that could be compared to two fully loaded jumbo jets crashing everyday. At 400,000 deaths in a year, the death toll from HIV/AIDS is nearly 400 times the combined annual death toll from railway accidents. Ignoring the requirements for treatment would involve accepting a death toll that would be unacceptable in other contexts. Clearly, then, the 'silent emergency' of HIV/AIDS in South Asia requires urgent attention in ensuring affordable and universal access to treatment, care and support.

It would also be erroneous to look at prevention, care and support as mutually

**Box 4.12**

## Meeting the challenge of drug pricing

Until 2001, drug pricing was a formidable deterrent for governments to consider the public provisioning of life-extending therapy to people with HIV. HAART cost patients about $10,000 to $12,000 a year in early 2000. In a bid to make ARVs affordable to the poor, UNAIDS undertook the Accelerated Access Initiative in mid-2000. The initiative began as a partnership between five pharmaceutical companies–GlaxoSmithKline, Boehringer Ingelheim, Bristol-Myers Squibb, Merck and Hoffman-La Roche—and the United Nations agencies. The initiative involved negotiations between these companies and developing country governments to supply HIV/AIDS medicines at reduced prices. Of the five companies, only GlaxoSmithKline announced a 90 per cent reduction in ARV prices. Further requests to lower prices met with little success until late 2000, when the first ARV generic drugs from the Indian pharmaceutical company, Cipla, entered the market. Within weeks, the prices of branded anti-HIV drugs plummeted to $500 to $800 for low-and middle-income countries.

In February 2001, Cipla offered to supply AIDS drugs for less than $1 a day, "a humanitarian price" for Africa, considering that nearly the entire population that needs ART there dies because drugs manufactured by multinational companies are priced beyond their reach. Among Cipla's earliest customers was Medecins Sans Frontieres, a global charitable organisation of doctors, which began buying the generic ARVs for $350 a patient a year, which was a thirtieth of the previous American price. For the Indian market, however, Cipla's combination therapy is priced higher. Even after a reduction in prices in late February 2001, Cipla's triple drug cocktail of Lamivudine, Stavudine and Nevirapine costs a patient in India Rs. 4,230 ($90.64) a month, which is more than the African price.

In August 2001, Cipla launched Triomune, a cocktail of Stavudine, Lamivudine and Nevirapine in a single bi-layered formulation. Triomune costs patients less than $40 a month. The patents for these drugs are presently controlled by different companies. GlaxoSmithKline holds the patent on Lamivudine, Boehringer Ingelheim on Nevirapine and Bristol-Myers Squibb on Stavudine. Cipla also released Nevimune suspension, a formulation of Nevirapine with Zidovudine and Lamivudine for children. Three of Cipla's generic ARVs were added to WHO's list of safe drugs in March 2002.

The fact that a generic drug manufacturer in South Asia could successfully and substantially bring down the costs of ARVs in sub-Saharan Africa holds out promise for a similar successful lowering of drug prices in the region. Moreover, the significant differentials in the cost of HAART in the countries of the region, as also the fact that the capacity to manufacture ARVs is available only in a few countries, offers an opportunity for regional trade and cooperation. This may also bring about a universal standard of treatment, care and support across the region.

exclusive responses to HIV/AIDS. There is enough evidence from various initiatives to show that the availability of care and support has enhanced the success of prevention. The experience of Brazil shows that a policy of providing free or subsidised HAART to PLWHA has helped de-stigmatise AIDS and facilitated the mainstreaming of HIV-related care (see Box 4.13). As a result, PLWHA had the opportunity to access counselling on not only treatment but also on prevention and protection for themselves and their families. This inclusive approach embodies the principle of GIPA, by accepting them as partners with healthcare providers in mitigating the impact of HIV and slowing its spread.

The humane approach of providing healthcare and prevention services ensures greater credibility, acceptance, sustainability and involvement on the part of both provider and recipient of care. In the case of SHIP in Sonagachi in the Indian city of Kolkata, sex workers were not approached with isolated messages on HIV prevention, but were simply offered free treatment for STIs. Similarly, the Community Health Education Society (CHES) in the Indian city of Chennai provided STI treatment to sex workers with no mention of HIV unless

the women brought it up themselves. Once sex workers found that they could receive care in a non-judgmental and non-discriminatory manner, they developed enough trust in the providers to share their intimate concerns about unsafe sexual practices and HIV. Condoms, made available at this point, were more likely to be accepted with a degree of understanding of why and how they needed to be used. Providing HAART to those in need, along similar lines, is likely to enhance HIV prevention besides providing care. HAART may also contribute to lowering the efficacy of HIV transmission by greatly reducing the numbers of viral particles in the semen and vaginal fluids.

The argument that HAART is beyond the reach of people in South Asia also has its limitations. It is true that the cost of the therapy, multiplied by the total number of PLWHA in the region, appear daunting, more so because these are recurring lifetime costs. However, a careful examination of global experiences indicates that affordable treatment need not be an unrealisable dream for developing countries (see Box 4.12).

The WHO has also made efforts to deal with the issue of access. In 2002, it issued guidelines for scaling up ART in resource-limited settings, as part of a commitment for expanding the coverage of ART to 3 million people by 2005. The guidelines were developed through a consensual process of consultations with healthcare providers from developed and developing countries and propose a public health approach to the issue. Such an approach incorporates the following elements:

- the scaling up of treatment programmes to meet the needs of PLWHA in resource limited settings;
- the standardisation and simplification of ARV regimens to support the efficient implementation of treatment programmes; and
- ensuring that ARV treatment programmes are based on the best scientific evidence in order to avoid the use of substandard treatment protocols which compromise the treatment outcome of individual

**Box 4.13**

### Lessons from the Brazil experience

In 1992, the World Bank had projected that there would be 1.2 million people living with HIV in Brazil by 2002. Brazil's programme of universal access links prevention programmes with treatment. The programme of compulsory licensing, under which most of the ARVs were manufactured locally and provided either free or at subsidised rates to those in need of treatment, is estimated to have prevented 600,000 new infections. Health authorities estimated that from 1994 to 2002, 58,273 AIDS cases and 3,371 cases of vertical transmission of HIV were prevented and that 90,962 deaths from AIDS-related illnesses were avoided. Equally impressive are a 60–80 per cent reduction in deaths and a seven-fold reduction in hospital admissions. The authorities estimated savings of $1 billion since the late 1990s.

The Brazilian experience is unique not only for its universal access but also for its use of generic drugs manufactured in Brazil. Use of generic drugs decreased individual drug costs by 72 per cent and by 64 per cent for two-drug- and three-drug-treated patients respectively, between 1997 and 2000. Despite the increasing number of patients, the total annual cost of therapy decreased 8 per cent from 1999 to 2000 and did not exceed the programme budget of $300 million. As a result of the national production of generics, the cost of ARV treatment has not escalated in recent years, making it possible to maintain universal access to ARV therapy. The Brazilian model offers important lessons for developing countries, because it shows that universal anti-AIDS therapy is an achievable goal, even in a low-income country.

*Source:* Valenti, 2002

clients and create the potential for the emergence of drug resistant virus.

There are also examples of successful government action to ensure affordable or free treatment from developing countries, notably Brazil (See Box 4.13). Though Brazil's per capita income is significantly higher than that of the South Asian countries, it is still instructive to see how governments can make treatment available to even those from the lower income groups by according the right priority to treatment. The provision of HAART and care, consistent with the frameworks of human development and human rights, help establish the necessity of ensuring affordable and universal access to treatment, care and support for PLWHA in South Asia.

A study by British medical journal, *Lancet*, comparing the costs of HIV prevention versus treatment reported that for every life-year purchased with treatment drugs, 28 life-years could have been purchased with prevention. The study[59] used Cipla's ARV costing of $350 a patient a year and did not include drug distribution costs. The implication is that the scarce resources available to fight AIDS should go to prevention programmes rather than treatment. Similar arguments that the potential savings of investments in prevention far outweigh the monies saved even with low cost ARV treatment intervention in developing countries, raise serious questions regarding the principles that are needed to guide policy makers in adopting public health strategies. The global debate on whether to accord equal funding priority to treatment and prevention continues, even as there is emerging consensus that a judicious mix of both are needed to achieve any measure of success in dealing with HIV/AIDS. Meanwhile, a number of field-based studies from developing countries are demonstrating the feasibility and benefits of HAART. They show that treatment and prevention can both be achieved in a simple and low cost manner.

A study of a model employer-funded programme for South Africa concluded that a programme that focused only on the prevention and treatment of opportunistic infections would be cost-effective for all companies and all grades of workers. If it was to prove profitable, HAART would have to be provided at $500 to $750 per patient per year. With Cipla making ARVs available in Africa for less than $370 a year, the potential viability of such a model is greatly enhanced.

The widespread introduction of HAART in low-income countries is dependent on the provision of generic ARV drugs that are either free or heavily subsidised. Meanwhile, HAART, accompanied by low cost options with regard to the routine laboratory monitoring of CD4 cell counts and viral loads, is already being attempted in some resource-limited settings. In the last two years, small groups of people living with HIV are receiving HAART because of the modest efforts of the few small-scale initiatives that exist in the Caribbean, India and Africa. They serve as beacons of hope for the millions in need of ART in the developing world.

*The widespread introduction of HAART in low-income countries is dependent on the provision of generic ARV drugs that are either free or heavily subsidised.*

### 4.5.2 Ways of reducing the costs of ARV drugs in South Asia

The access to ARV treatment is severely limited in developing countries in general and South Asia in particular because of several reasons: lack of proper guidelines on the correct selection and use of drugs, lack of adequate and competent health services, lack of affordable drugs on a sustainable basis, high price of patented drugs and low purchasing power.

**Box 4.14**

### The role of equitable pricing in ensuring access

Equitable pricing—or differential or tiered pricing—refers to the concept of pricing products in different markets according to the consumers' ability to pay as measured by their income levels. By pricing ARV drugs at different prices for different consumers, companies can hope to partially recover costs while, at the same time, making these drugs available to as many patients as possible. Segmentation of markets for the purpose of equitable pricing can be done using the Human Development Indices (HDI) in a coordinated and transparent manner, since this measure would factor in public provision of health along with individual ability to pay. Differential pricing has clear benefits and risks. However, the risks can be mitigated through careful policy planning.

**BENEFITS**

**Increased access**: This can be ensured through greater affordability. Since affordability is a graded, and not a zero-one, concept, differential pricing ensures access to far more patients than would otherwise be possible. In other words, every additional dollar reduced in prices makes the drug more affordable for a new patient.

**Increased revenues**: A single, universal price will keep pharmaceutical companies out of low-income countries, which are potential markets. By using equitable pricing, companies can increase revenues in absolute terms. The financial impact of pricing to market, therefore, should be seen in terms of revenue gained from entering markets as opposed to revenue lost from charging lower prices.

**RISKS**

**Parallel re-importation**: The most obvious risk is that of leakages. Pharmaceutical companies have voiced the dangers of low-priced drugs being illegally transported back to developed country markets, thereby lowering prices in the high-priced markets. Clearly, if markets are not segmented, prices can fall in both markets to the lower level.

However, this risk can be countered by national governments through carefully designed policies that prevent re-importation[60] of these drugs to developed markets. The experience from other differentially priced drugs and products has been encouraging and there has been little evidence of large-scale re-entry of cheaper products back to developed markets.

**Sustainability concerns**: Since differential pricing is primarily a producer-driven initiative, there are concerns over whether it can be seen as a stand-alone solution. There is also no guarantee that prices will be the lowest possible, since it depends essentially on the discretion of the firms. It also faces the danger of being used as a bargaining tool to extract reciprocal concessions on intellectual property rights (IPR) law design, and other critical issues.

Some of these shortcomings could be mitigated if differential pricing is part of a global initiative with clear, transparent rules. The private, not-for profit and government sectors will need to work together to ensure that pricing is based on marginal cost for the poorest countries, that all essential drugs are covered and that equitable pricing is just one, and not the only, strategy to ensure access to drugs.[61]

There have been several attempts by public-private collaborations to offer ART drugs at decreased prices, the most important of these being the Accelerating Access Initiative. Till March 2002, 78 countries had expressed interest in participating in the Initiative. Each of these countries has committed itself to, and is in the process of, developing national care and treatment plans. So far, 18 countries (12 from Africa, five from Latin America and the Caribbean countries and one from Europe) have actually reached an agreement with the drug companies. While the initiative is a useful attempt to lower the price of drugs, it clearly needs to be supplemented by other measures as well.

### 4.5.3 The role of patents

Patents are a major factor in restricting access to ARV drugs. Pharmaceutical companies in high-income countries develop these drugs after years of research

and development at high costs.[62] Patents on these drugs preserve monopoly rights on producing them for a minimum number of years and the selling price includes a premium that helps recoup the research costs. Generic versions of these drugs are much cheaper to produce.

The cost of these drugs in a particular country depends on several factors. Some of these are related to patents: whether the pharmaceutical companies have applied for patents in that country (which, in turn, depends on the size and value of the potential market); whether the country permits product patents on pharmaceuticals; and whether it has the technical capacity, market size and the legal framework to produce generic versions of these drugs. Pricing policies within these countries also determine the cost. India, for example, has been imposing price controls on bulk drugs through the Drug Price Control Order (DPCO), 1995. However, the number of drugs under this order have been steadily decreasing after complaints by the industry over loss in profitability. Combined with the change in the patent regime, this has adverse implications for access to affordable drugs.

Till 1995, individual country patent laws were determined by domestic policy. However, the global system of intellectual property rights (IPR) is today much more structured than before. With the establishment of the World Trade Organisation (WTO) Agreement on Trade-Related Intellectual Property Rights (TRIPS), most countries are required to strengthen their intellectual property laws. TRIPS has profound implications for the availability of and access to medicines for the South Asian countries, especially in the context of HIV/AIDS since most of these medicines are the products of ongoing research, and their supply will be immediately affected by changes in patent laws.

### The TRIPS Agreement and access to drugs

The TRIPS Agreement, which came into effect in 1995, requires all member-countries to extend intellectual property rights to all technologies, covering both products and processes.[63] TRIPS requires countries to recognise product and process patent rights in the pharmaceutical sector and offer patents for a minimum of 20 years in order to protect the rights of innovators and balance them with the rights of consumers.

India, Pakistan, Maldives, Bangladesh and Sri Lanka together account for 98.7 per cent of all HIV/AIDS cases in the region. All five of them are members of the WTO. Nepal and Bhutan currently have observer status at the WTO. Nepal has begun negotiations for accession and Bhutan needs to begin accession negotiations within the next five years. Iran's application for accession has not been unanimously approved by the WTO General Council, and Afghanistan has not yet applied for membership.

Despite their varying official WTO status, all countries in the region are affected by the TRIPS Agreement, since (barring India) all of them lack the capacity to manufacture drugs locally and are dependent on imports from countries that are signatories to TRIPS.

The single-most important implication of TRIPS for access to treatment is the impact of patent protection on drug prices. In the case of India, several studies have shown that the introduction of patents once TRIPS is implemented can raise the prices of drugs by as much as 200 per cent.[64]

TRIPS also affects the production of generic versions of drugs. Countries in South Asia have different levels of production capacity. India has innovative capabilities and the technical capacity to produce generic versions of drugs. Pakistan, Nepal, Sri Lanka, Afghanistan, Bangladesh and Iran have reproductive capabilities to differing degrees, since the pharmaceutical industry in these countries can manufacture finished products from imported ingredients only. Bhutan and the Maldives depend entirely on imports to fulfil their drug requirements.[65]

*TRIPS has serious implications for public health outcomes in poor countries since it not only affects medicines for HIV/AIDS but also research in other diseases.*

TRIPS restricts 'reverse engineering' of patented products and increases the waiting time to market generic versions of these products to the 20-year period of patent protection. The generic drugs industry in India owes its existence to the absence of product patents in the pharmaceutical sector and comprises, along with indigenous research-based firms, up to 74 per cent of the total pharmaceutical market. With the advent of TRIPS, the industry will be unable to produce generic versions of new drugs till the patent term expires or a compulsory license is issued.[66]

Apart from TRIPS, several bilateral agreements between developed and developing countries on intellectual property rights have restrictive clauses that sometimes negate the advantages negotiated under the multilateral framework. The United States and Sri Lanka signed a bilateral agreement in 1991, under which the terms for issuing a compulsory license are significantly more stringent than under TRIPS. For example the government is required to negotiate compensation to the companies in all cases of compulsory licenses except when those licenses are granted to remedy violations of competition laws. Also, all decisions regarding compulsory licenses are subject to judicial review. Such terms make many of the flexibilities negotiated under TRIPS redundant.

TRIPS has serious implications for public health outcomes in poor countries since it not only affects medicines for HIV/AIDS but also research in other diseases. Recognising this problem, the TRIPS Agreement provided for exceptions to these rights under certain specific conditions. However, it became increasingly clear that this was not enough. The exceptions could be challenged under the WTO Dispute Settlement Procedures, and developing countries lacked the legal expertise and the resources to fight these often lengthy and expensive battles.

As the implications of TRIPS for HIV/AIDS medicines became clearer in the years since the Agreement was signed, civil society groups and HIV/AIDS activists across the world launched an international campaign against the restrictive provisions of the agreement. Developing country governments also felt increasingly constrained by the TRIPS provisions and demanded more flexibility to address their public health concerns. In response to these concerns, the Doha Declaration on TRIPS and Public Health was adopted at the Fourth WTO Ministerial Conference in 2001.

### The Doha Declaration

The Declaration reaffirmed the commitment of the WTO members to public health goals. Specifically, members agreed "*that the TRIPS Agreement does not and should not prevent Members from taking measures to protect public health...that the Agreement can and should be interpreted and implemented in a manner supportive of WTO Members' right to protect public health and, in*

*particular, to promote access to medicines for all.*"

While the Doha Declaration was primarily a political statement, it lays down clear legal guidelines for dealing with cases in the dispute settlement process, and is an important and necessary reaffirmation of the precedence of public health concerns over patents. Since the Declaration, however, WTO members have found it difficult to reach an agreement on ways of operationalising it. Following the discussions at the mini-ministerial in Sydney, Australia, in 2002, the chairman of the WTO TRIPS Council released a draft on 19 November 2002 for a decision by the General Council. Most countries agreed with the chair's proposal of a moratorium on disputes regarding TRIPS till the Agreement is amended. However, disagreements remain over certain elements of the solution such as coverage, scope of eligible countries, etc.

The Doha Declaration was particularly important for the South Asian region, because most countries are dependent on imported HIV/AIDS drugs, and, given the low purchasing power in these countries, the cost of drugs is an important concern in the provision of treatment. However, the Declaration and the flexibilities in TRIPS at the international level will only partially help in ensuring access. Eventually, implementation of these provisions will be done through national legislation and appropriate domestic policy.

Most WTO members in the South Asian region have already altered their patent laws to make them TRIPS-compliant. India, Pakistan and Sri Lanka have time until 1 January 2005 before bringing the pharmaceutical sector under TRIPS. However, it is not clear if all the amendments carried out fully take advantage of the flexibilities under the

**Box 4.15**

## Clarifications under the Doha Declaration

**Article 31**: The TRIPS Agreement, under Article 31, allows for compulsory licensing under a set of conditions. The Doha Declaration increases the flexibility available to member-countries to define the circumstances under which compulsory licenses are necessary. Under TRIPS, governments are expected to negotiate with patent holders for voluntary licenses on reasonable terms before issuing compulsory licenses, except in the case of national emergencies. The Doha Declaration leaves the definition and scope of national emergencies to the governments, giving them the discretion to categorise public health crises as national emergencies if necessary.

Article 31(f) of the TRIPS Agreement states that compulsory licenses should be issued primarily for supply in the domestic market. The Doha Declaration recognises that this does not address the problem of countries with little or no manufacturing capacity, or with insufficient domestic demand that are completely dependent on imports. Several proposals are currently under discussion at the WTO to identify potential options for imports of generic drugs.

**Article 30**: This section provides for limited exceptions to exclusive rights[67] provided under patents. Several countries and experts have proposed an authoritative interpretation under Article 30 as a solution to the problem of allowing generic drugs for exports[68] that is more streamlined and administratively simpler to execute than Article 31.

**Article 6**: The TRIPS Agreement leaves countries free to decide the principle of exhaustion of IP rights that they wish to follow, subject to national treatment and most favoured nations principles. The principle of exhaustion defines the point of sale at which the producer's right over the product expires. The Doha Declaration reaffirmed the right of countries to practise the principle of international exhaustion of IP laws, allowing for private purchase and resale of patented products across countries through parallel imports. While this is an important provision for private suppliers of drugs, it does not resolve the problem of large-scale purchase of drugs at affordable rates.

Table 4.4

**Comparative analysis of patent laws**

| Country | Patent Law |
|---|---|
| India | Indian Patents Act, Second Amendment 2002: Provides patent protection for all processes and products involving an "inventive step" and capable of "industrial application". The Act exempts pharmaceutical products till December 2004, and clarifies rules for issuing compulsory licenses. However, the Bill has several clauses, which remain ambiguous and will need clarification before India accedes to TRIPS in 2005. |
| Pakistan | Patents Ordinance, 2000: Promulgated to bring the country's patent laws in line with TRIPS, the new law recognises patents on all products and processes which are new, involve an inventive step and are capable of industrial application, along with provisions for compulsory licensing and parallel imports. |
| Sri Lanka | Code of Intellectual Property, Act No. 52 of 1979 The Act provides protection for patents for a period of 15 years. It does not comply with TRIPS and new legislation will be enacted before January 2005. Sri Lanka does, however, have bilateral IP agreements (e.g. with the United States) under which it accords higher protection to patents from those countries. |

TRIPS Agreement and the Doha Declaration. Maldives and Bangladesh, along with other least developed countries have time until 2016 to implement the patent provisions of TRIPS for pharmaceutical products.

The challenge of providing access to good quality drugs to PLWHA is, indeed, a daunting one, dealing as it does with issues of medical research, pricing and intellectual property rights. However, facing the challenge is an integral part of dealing with HIV/AIDS in a rights-based framework.

## 4.6 International Human Rights Framework

The Universal Declaration of Human Rights has been recognised as the Magna Carta of human rights all over the world. The basic tenets of this declaration are the right to liberty, security and freedom of movement, the right to work, the right to education, the right to social security and services, the right to equality-equal protection before the law, the right to marriage and family and the right to health.

International human rights have been further codified in a number of legally binding international covenants and declarations such as the following:

- International Convention on the Elimination of All Forms of Racial Discrimination (CERD-1965)
- International Covenant on Civil and Political Rights (ICCPR-1966)
- International Covenant on Economic, Social and Cultural Rights (ICESCR-1966)
- Convention on the Elimination of All forms of Discrimination Against Women (CEDAW-1979)
- Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (CAT – 1984)
- Convention on the Rights of the Child (CRC-1989)

International human rights instruments play an important role in respect of HIV/AIDS and human rights, since their norms may guide the establishment of procedural, institutional and social mechanisms to counter the HIV/AIDS epidemic. In addition to the legally

Table 4.5

**Status of ratifications of main international human rights instruments[69]**

| Country | International Covenant on Economic, Social and Cultural Rights | International Covenant on Civil and Political Rights | Convention on the Elimination of All Forms of Racial Discrimination | Convention on the Elimination of All Forms of Discrimination Against Women | Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment | Convention on the Rights of the Child |
|---|---|---|---|---|---|---|
| **Afghanistan** | X | X | X | — | X | X |
| **Bangladesh** | X | X | X | X | X | X |
| **Bhutan** | — | — | — | X | — | X |
| **India** | X | X | X | X | X | X |
| **Iran (I.R.)** | X | X | X | — | — | X |
| **Maldives** | — | — | X | X | — | X |
| **Nepal** | X | X | X | X | X | X |
| **Pakistan** | — | — | X | X | — | X |
| **Sri Lanka** | X | X | X | X | X | X |

Note:—indicates country has not ratified
*Source:* Office of the United Nations High Commissioner for Human Rights (http://www.unhchr.ch/pdf/report.pdf)

binding instruments listed above, the international community, through its established mechanisms, like the UN General Assembly and the Commission on Human Rights, has issued morally binding declarations and resolutions on emerging issues and interpretations of the codified human rights standards.

State parties to most of the human rights instruments need to submit reports to treaty monitoring bodies to receive guidance on more effective implementation. This also serves the purpose of enabling the international community to pressurise state parties to speed up the implementation, by publishing the respective implementation statuses and scenarios. The treaty monitoring bodies, such as the Human Rights Committee, the Committee on the Rights of the Child, the CEDAW Committee etc. issue comments and concluding observations on the reports submitted by the state parties (See Annex I). These bodies also take into consideration information submitted by non-governmental sources in the respective countries.

Two prominent HIV/AIDS-specific international agreements are the Declaration of Commitment passed at the United Nations General Assembly Special Session on HIV/AIDS (UNGASS), June 2001 and the International Guidelines of HIV/AIDS, 1996 (See Annex II). There are other important documents as well.[70]

As member states of the United Nations, South Asian nations are obliged to promote respect for human rights without discrimination. Moreover, international human rights law and covenants are binding on state parties that have signed and ratified them.

Despite South Asian nations being signatories to all of these agreements, the situation on the human rights front is not satisfactory.

### 4.6.1 International guidelines on HIV/AIDS

In September 1996, the Second International Consultation on HIV/AIDS and Human Rights, convened by UNAIDS and the Office of the UN High Commissioner for Human Rights, led to the formulation of the *International Guidelines on HIV/AIDS and Human Rights*.[71] The Guidelines address multi-sectoral responsibilities and accountability, including improving the roles of the government and private sector. In addition, they stress the duty of the States to engage in law reform and identify legal obstacles to an effective HIV/AIDS strategy of prevention and care. The attendant difficulties in the actual implementation of the Guidelines must now be addressed.

*In addition, the Guidelines stress the duty of the States to engage in law reform and identify legal obstacles to an effective HIV/AIDS strategy of prevention and care.*

#### United Nations Declaration of Commitment

The UN Declaration of Commitment is of particular interest since all countries of the region, barring Afghanistan, are signatories to it. The UNGASS was the first event of its kind organised by the United Nations to address HIV/AIDS and included participation by civil society (See Box 4.16).

The Declaration addresses issues of prevention, care, support and treatment; leadership at the national, regional and sub-regional level; reducing vulnerability; alleviating social and economic impact; research and development; respecting implementation of multi-sectoral strategies; conflict and disaster-affected regions; resources; and follow-up at the national, regional and global levels. However, the need for a human rights-based approach to deal with HIV/AIDS finds only brief mention in the Declaration.

Thus, it is not surprising that the document fails to comprehensively address the needs of vulnerable populations such as men who have sex with men, sex workers and injecting drug users. This oversight is of concern to the countries where the promotion of rights of vulnerable populations is largely absent. Empowerment through human rights initiatives has been difficult to initiate due to social stigma and cultural pressures. It is evident that greater international initiatives are required to draw attention to these deficiencies and advocate for human rights protections as part of HIV/AIDS strategies.

### 4.6.2 Regional agreements

The SAARC Convention on Preventing and Combating Trafficking in Women and Children for Prostitution, held in January 2002 marked an important step towards addressing the concerns of gender, sex work and human rights. The SAARC member states—Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka—were signatories to the Convention, which requires all state parties to enact legislation that provides punishment for the offence of trafficking, including for keeping, maintaining, managing, knowingly financing, or knowingly renting a place used for trafficking. A major drawback of the Convention is that it considers trafficking solely for the purpose of 'prostitution' thereby limiting the scope of the legislation. Further, the Convention adopts a predominantly welfare-based approach in dealing with trafficking, as opposed to one based on protecting human rights.

**Box 4.16**

### The United Nations General Assembly Special Session (UNGASS) on HIV/AIDS and the UNGASS Declaration of Commitment

In June 2001, Heads of State and Representatives of Governments of 189 nations met at the United Nations General Assembly Special Session ON HIV/AIDS (UNGASS). This meeting was a historic landmark, in which member states recognised that the world faced an unprecedented and accelerating crisis, which was seriously undermining development achievements and threatening peace and security, and which required global action.

A Declaration of Commitment was adopted by the delegates, which the UN Secretary-General Kofi Annan described as "a blueprint for future efforts by the United Nations system and Member States to reduce the spread of HIV/AIDS and alleviate its impact" (24 July 2001, letter to UN Resident Coordinators). This UNGASS Declaration of Commitment provides a framework for an expanded response to the global HIV/AIDS epidemic. Its goals and targets are designed to address all dimensions of the epidemic and it represents an agenda for change and a benchmark for global action.

The Declaration of Commitment recognises that HIV/AIDS is a development challenge and addresses some issues that have been overlooked in traditional public health approaches to the epidemic, including the need to empower women, the importance of human rights issues and the interaction between prevention and care. In particular, the Declaration states that "s*trong leadership at all levels of society is essential for an effective response to the epidemic"* and calls for a new type of leadership that has governments at its centre, with the full involvement of civil society, the private sector and PLWHA.

The emphasis of the Declaration of Commitment is on a multi-sectoral approach. Within the Declaration, specific commitments are made in the areas of enhanced leadership; prevention, care, support and treatment; protecting human rights, particularly those of PLWHA; reducing vulnerability, especially of women; assisting children who have been orphaned and made vulnerable by HIV/AIDS; alleviating the social and economic impact of HIV/AIDS; further research and development; addressing HIV/AIDS in conflict zones and disaster-affected regions; ensuring new and sustained resources; and maintaining the momentum and monitoring the progress of responses.

The Asia Pacific Forum (APF) of National Human Rights Institutions, a regional network comprising the Human Rights Commissions of Australia, Fiji, India, Indonesia, Mongolia, Nepal, New Zealand, Philippines and Sri Lanka, has a crucial role to play in ensuring respect for human rights in the context of HIV/AIDS. The APF members can ensure the protection of the human rights of PLWHA and consequently the creation of an enabling environment through cooperation; information sharing; training and development for institution members and staff; developing and sharing technical expertise; and benefiting from the 'best practice' experiences of other institutions.[72] At the sixth annual meeting of the APF held in Melbourne in September 2001, the members "committed themselves to combat discrimination and human rights violations on the basis of HIV/AIDS and called upon the assistance of the United Nations, governments and NGOs in the performance of this task".

### 4.6.3 HIV outreach workers among vulnerable or marginalised groups: human rights defenders

Sex workers, men who have sex with men, injecting drug users, peer educators and outreach workers make essential partners within national HIV prevention efforts. If they possess accurate information, the means of protection and a supportive environment amongst their peers, family and the surrounding community (including administration of justice and law enforcement agencies), they can contribute effectively to the reduction

of transmission of HIV to the general population.

The mobilisation and empowerment of women and men working in the sex industry, the MSM community and drug users to access basic services and information has strengthened efforts for the management of the HIV/AIDS epidemic. Such empowerment and mobilisation should be seen as an essential ingredient to an effective HIV/AIDS response, as it contributes to saving lives. Those within the vulnerable and marginalised groups who are working to this end are actively defending human rights and principles.

*The lack of an enabling State structure, along with active discrimination and harassment by officials acts as a further disincentive for people to disclose their HIV status, making it harder to contain the epidemic.*

The international community has, in recent years, established that human rights defenders deserve recognition and protection by the state.[73] This responsibility is outlined in the General Assembly resolution, 'Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognised Human Rights and Fundamental Freedoms'.[74] It is, therefore, critical that all governments embrace this responsibility and protect those key partners in the response to HIV/AIDS.

## 4.7 The Role of the State

The legislatures and judiciaries in South Asia have had an uneven record in protecting human rights of PLWHA. This partially reflects the lack of understanding of the epidemic within these branches of the government themselves. It also highlights the additional challenges that face PLWHA in countries where the State is insensitive to their needs. Even more worrying are the well-documented incidents of systemic harassment of PLWHAs and designated human rights defenders.[75] The lack of an enabling State structure, along with active discrimination and harassment by officials acts as a further disincentive for people to disclose their HIV status, making it harder to contain the epidemic.

## 4.8 Recommendations

An overview of the legal frameworks in the South Asian countries clearly brings out several lacunae in the law and human rights guarantees that have an adverse impact on PLWHA and those most vulnerable to the epidemic. Certain unequivocal measures, therefore, need to be taken at the policy and legislative level to effectively control the spread of the epidemic.

### The decriminalisation of lives and the guarantee of positive rights

It is clear that all South Asian legal regimes criminalise those most vulnerable to the epidemic. It is because of the legal sanctions and social marginalisation and stigma that these groups face that they find themselves vulnerable to public health crises such as HIV/AIDS. Removing these legal sanctions will go a long way in addressing the problem of vulnerability and stigma faced by these groups and will check the spread of HIV/AIDS not only in their communities but in the general population as well. The empowerment of individuals is the best way to reduce vulnerabilities to HIV/AIDS and this can be done not just through the provision of information and education but also through the guarantee of legal protection.

Protecting the human rights of those most vulnerable to HIV/AIDS—a central component of an effective control strategy—will firstly require the decriminalisation of vulnerable groups through a serious and committed attempt at law reform and sensitisation of law

**Box 4.17**

## Human rights violations and systemic harassment

*Bangladesh*: The Bengal Vagrancy Act, 1943 defines a 'vagrant' as "a person found asking for alms in any public place or wandering about or remaining in a public place in such condition or manner that makes it likely that such a person exists by asking for alms" (Section 7). The Special Magistrate has the power to make a summary inquiry and, after hearing the person, can declare him/her to be a vagrant. The person is then handed over to the custody of the officer in charge of the nearest receiving centre. The medical officer at the centre is empowered to examine the vagrant and give a medical report which must, among other things, state whether the vagrant is a mentally deficient, a leper or suffers from any other communicable disease. Lepers, insane or mentally deficient persons and those suffering from communicable diseases and children are segregated from each other. The Act is grossly misused and the police often arrest people who are wage earners such as commercial sex workers, vendors, domestic helpers, day labourers, minor children on the streets and detain them in the vagrant homes in inhuman conditions. According to a study[76] a majority of the inmates in the vagrant homes are women and most of them are commercial sex workers.

*Iran:* In Iran, sex workers face a maximum penalty of execution by firing squad or stoning and such executions are common. There have been cases of employment being terminated on the grounds of HIV status. However, it has also been reported that the health ministry has, since October 2001, banned the expulsion of PLWHA from work. The exact extent and implications of this statement have not been verified.

*India*: Sodomy is an "unnatural offence" under Section 377 of the Indian Penal Code, the wording of which is identical to that of the Penal Code of Bangladesh. Unnatural offences include carnal intercourse committed against the order of nature by a person with a man or woman or by a man or woman in any manner with an animal. Section 377 has been held to prohibit oral intercourse as well. However, through the 1990s, the use of the section has been specific to the context of child sexual assault, for which there is no separate penal provision. The provision has also been used to harass and victimise homosexuals, including men who have sex with men. Section 294 of the Indian Penal Code, which penalises any kind of "obscene behaviour in public", as well as local Police Acts have also been used against men who have sex with men. Activists and NGO workers often face harassment by police authorities, as happened in the town of Lucknow in July 2001, when the police raided the offices of two NGOs working with the MSM community. Four activists were arrested under Section 377 and charged with criminal conspiracy, abetment and possession/sale of obscene materials. They were denied bail by the magistrate's court on the ground that they were a "curse to society". The High Court later granted bail after 45 days of imprisonment. The actions of the local police in this case expose the gaps between government policy and State action. In its report pursuant to a National Conference on Human Rights and HIV/AIDS in November 2000, the National Human Rights Commission has recommended the review and revision of Section 377 in order to empower MSM and give effect to HIV/AIDS interventions. The report also recommended the legalisation of sexual activities between consenting adults.

enforcement, healthcare and other authorities. However, this should only be a first step. In addition, it will be necessary to endow these communities with the range of positive rights that allow for the full realisation of human potential. These include rights that guarantee life and liberty in all its varied forms (including the rights to sexual orientation, founding of family, marriage and other civil rights), equality and non-discrimination, employment, access to services (including healthcare, social security, education, civic amenities, housing, transport etc.) and freedoms of speech, expression, movement and organisation.

However, any attempt at decriminalisation must be sensitive to the differences among the various groups vulnerable to HIV/AIDS, as a universally applicable approach is not possible. Additionally, there is debate within these communities and groups on the appropriate legal response to their situation. Any effective legal response, then, must be undertaken

after consultation with the stakeholders from within these communities.

The exercise of collective power by sex workers can be one strategy that can successfully minimise HIV/AIDS vulnerabilities and human rights violations, as can be seen in the case of the SHIP project and Durbar Mahila Samanvay Committee (DMSC) in Kolkata, India.

The argument that sex work should be decriminalised stems from rights-based and public health perspectives. Fear of prosecution has been seen to inhibit sex workers from accessing information and services including healthcare and HIV/AIDS information. Further, the illegal status of sex work makes negotiation with clients difficult. It also makes sex workers vulnerable to abuse both within the sex work setting (madams, pimps, brothel operators and owners) and outside (clients, law enforcers, lawyers, the magistracy etc.). Decriminalisation implies that sex work, including soliciting and earnings from sex work, must not be considered criminal in so far as they pertain to consenting adults. There have been growing demands for this from sex workers' collectives, organisations working with sex workers, HIV/AIDS intervention groups, public health specialists and rights activists. Such demands have come in contexts where sex workers have been able to present their perspectives and where the adverse public health implications of criminalisation of sex work have been recognised.

*It is important to note, however, that decriminalisation of these groups does not mean ignoring the root causes which put people in positions of vulnerability.*

There are other perspectives on the question of decriminalisation of sex work, including the view that sex work, but not the sex worker, should be criminalised. These ideas largely arise out of the view that sex work itself amounts to exploitation of women. It is not clear how sex work can be criminalised without having an adverse impact on the lives of sex workers. The primary issue in advocacy around these issues is the involvement of sex workers in the decision-making processes. This itself is bound to be a difficult task, considering that there are a wide range of contexts in which sex work is carried out in the region and even within countries. Decriminalisation, however, seems to be a prerequisite for the participation of sex workers in such decision-making processes.

It is important to note, however, that decriminalisation of these groups does not mean ignoring the root causes which put people in positions of vulnerability (such as the mafia behind the trafficking of humans or smuggling of narcotics). It only means that laws must begin to target those who are, in reality, behind the crimes.

## Protection for harm reduction programmes

Until the time that a human rights-friendly legal regime is put into place, it will be necessary to introduce legal provisions that will allow harm reduction programmes (providing clean needles to injecting drug users and condoms to sex workers and men who have sex with men) to be carried out among vulnerable groups. In the absence of legal provisions, such programmes could easily be interpreted as abetting crimes, as they already have been in India, despite government support of such interventions. Even here, law reform must go hand in hand with the sensitisation of state machinery. Such law reform will require that NGO and community-based organisations working on harm reduction through advocacy, education and counselling be allowed to function outside the purview of criminal laws such as those relating to obscenity and public

nuisance. Such harm reduction programmes must, however, lead to the ultimate goal of law reform to decriminalise the behaviour of various vulnerable groups.

## The introduction of anti-discrimination legislation

As has been observed earlier, legal regimes in South Asia that guarantee equality apply only to the public sector. As a result, private healthcare or employment falls outside the scope of the non-discrimination legislation and they are, therefore, free to refuse treatment or jobs to PLWHA. PLWHA, therefore, have no legal recourse when they face such discrimination in the private sector. This is a huge lacuna in the law that requires to be filled urgently.

## Legal remedies for PLWHA

Apart from specifically protecting the rights of PLWHA and those most vulnerable to HIV/AIDS, it is also necessary to ensure that appropriate and accessible legal remedies are available to them. This can be done by inserting relevant provisions in the respective constitutions and the civil and criminal laws, where such safeguards and remedies do not already exist.

The remainder of this section will look at legal remedies available to PLWHA in the context of the Indian legal system.

To ensure that the rights of PLWHA are protected and they are able to take recourse to legal remedies, it is necessary (a) to ensure that the rule of law exists; and (b) to build an enabling environment so that fear, discrimination and stigma do not hinder access to the judicial system.

### *Constitutional remedies*

Article 32 of the Indian Constitution has a remedial provision for the violation of fundamental rights by the State and for the enforcement of fundamental rights against the State. The Supreme Court of India has the power to issue directions, orders, writs or any appropriate directions for the enforcement of fundamental rights. Similar powers have also been conferred by the Constitution on the High Courts of each state. The right to move the courts for the enforcement and/or protection of fundamental rights relates only to violation by the State or State-run organisations or agencies. Therefore, if discriminatory treatment is meted out to PLWHA working in the public sector or accessing public hospitals, they can approach the courts for the enforcement of their fundamental right to equality guaranteed under Article 14.

It is important to note that certain fundamental rights under the Indian Constitution (Articles 17, 23 and 24 dealing with untouchability, traffic in humans and forced/ child labour) can also be enforced against private individuals if there are violations. However, there is no similar provision for HIV positive status.

*Legal regimes in South Asia that guarantee equality apply only to the public sector.*

### *Civil remedies*

There are certain other rights of people that may not be fundamental rights, but are legal rights or civil rights conferred by a statute, e.g. custody rights, maintenance etc. Such rights are enforceable through the civil courts in the country. Therefore, if a private employer discriminates against a PLWHA, then, subject to the existing laws, the employer can be taken to court for the violation of the rights of the employee. Persons who have been illegally and unlawfully dispossessed from their homes can file a suit for repossession. Similarly, issues relating to land, property rights, tenancy, maintenance, custody, divorce, dues from the employer, etc. can find legal recourse through the civil courts.

*While commitment at the international and regional level is extremely crucial in initiating debate and setting guidelines for building a human-rights framework, their implementation can be ensured only when backed by effective legal mechanisms at the national level.*

***Criminal law remedies***

The penal code and other penal statutes lay down acts or omissions that constitute an offence. Once a complaint is made and is recorded as cognizable or non-cognizable depending on the gravity of the offence, investigation and trials follow. A person is considered innocent until proven guilty. Victims of violence, persons who have been thrown out of their house because of their HIV positive status, individuals from vulnerable groups who are being extorted, exploited etc. can file a complaint in the police station. If the complaints are not registered at the police station, they can send written complaints to the senior officials and also make a complaint to the magistrate.

***Other fora***

In India, certain statutory fora like consumer courts, Administrative Tribunals, *Lok Adalats* (people's courts) etc. have been set up to facilitate speedy disposal of cases on issues ranging from consumer disputes to grievances with government departments and administrative matters within the civil services. These have not yet been accessed by PLWHA and their networks. Their usefulness for issues relating to PLWHA needs to be explored.

## National human rights institutions

While commitment at the international and regional level is extremely crucial in initiating debate and setting guidelines for building a human rights framework, their implementation can be ensured only when backed by effective legal mechanisms at the national level. National human rights institutions are one such mechanism. These are independent bodies established by the State for the effective promotion and protection of human rights issues that arise in the context of HIV/AIDS.

In his address to the international meeting of human rights institutions in Geneva in April 2001, the Executive Director of UNAIDS identified five practical ways in which national human rights institutions can strengthen their work regarding HIV/AIDS:

- by investigating violations of human rights that occur in the context of HIV/AIDS;
- by conducting public inquiries focusing on these violations;
- by receiving and, where appropriate, redressing complaints of HIV/AIDS-related human rights violations;
- by providing advice and assistance to governments in the area of human rights and HIV/AIDS; and
- conducting human rights education in the context of HIV/AIDS.

These commitments require the integration of HIV/AIDS-related human rights into institutional strategies and programmes at the national level.[77]

In India, the National Human Rights Commission[78] and the State Human Rights Commissions are empowered to inquire into complaints of violation of human rights either *suo moto* or on a petition by a victim or someone acting on his behalf. They can also inquire into instances of negligence in the prevention of such violation by a public servant. The Commissions have powers to review the safeguards provided under the Constitution or any law for the protection of human rights and recommend measures for their effective implementation. The Commissions may undertake research in the field of human rights and take measures to promote awareness of human rights among all sections of society.

In Nepal, the Human Rights Commission Act (1997) established an independent

and autonomous National Human Rights Commission for the effective enforcement as well as protection and promotion of human rights conferred by the Constitution and other prevailing laws.

Bangladesh has also initiated moves to constitute an independent Human Rights Commission. The law, justice and parliamentary affairs ministry is in the process of finalising a draft legislation, which will also fix the terms of reference of the proposed commission. According to the draft, the commission would investigate the allegations of human rights violation and take necessary actions as per the existing provisions of law.

Since 1986, the Human Rights Commission of Pakistan (HRCP) has played a leading role in providing a highly informed and independent voice in the struggle for human rights and democratic development in the country. It is an independent, voluntary, non-political, non-profit making, non-governmental organisation. One of the main functions of HRPC is to work for the ratification and implementation by Pakistan of the Universal Declaration of Human Rights and of other related charters, covenants, protocols, resolutions, recommendations and internationally adopted norms.

## Strengthening of social capital

The poor development of social capital in South Asia has severely limited the progress with regard to dealing with HIV/AIDS, as societies remain entrenched in gender inequities, caste and class-based violence, religious fundamentalism, violations of the rights of marginalised populations and an overall environment of intolerance. Provisions for strengthening, for example, educational systems, infrastructural facilities and local governance mechanisms would contribute significantly to enriching the social, cultural and economic environment of communities. This, in turn, would have a favourable impact upon the indices for development at macro levels.

## Role of parliamentarians[79]

Parliamentarians can play a key role at the local, national and regional levels in initiating dialogue and legislative action on HIV/AIDS and human rights issues, as well as mobilising financial resources to support HIV/AIDS programmes. They can work at several levels.

- As political leaders, they can influence public opinion, and can increase public knowledge of relevant issues.
- As legislators, they vote on acts of Parliament and can ensure that legislation protects human rights, and advances effective prevention and care programmes.
- As advocates, they can mobilise the involvement of government, private sector and civil society to discharge their societal responsibilities in responding appropriately to the epidemic.
- As resource mobilisers, they can allocate financial resources to support and enhance effective HIV/AIDS programmes that are consistent with human rights principles.

An important regional initiative is the setting up of the SAARC Medical Parliamentarians, which held a meeting on reproductive health, STDs and HIV/AIDS in Kathmandu, Nepal, in May 1998. The meeting issued a Declaration on the Prevention and Control of HIV/AIDS. The Declaration asked parliamentarians to take a stronger role in advocacy at the regional, national, and community levels. The meeting also recommended the establishment of a regional forum of SAARC

*The poor development of social capital in South Asia has severely limited the progress with regard to dealing with HIV/AIDS, as societies remain entrenched in gender inequities, caste and class-based violence, religious fundamentalism, violations of the rights of marginalised populations and an overall environment of intolerance.*

Parliamentarians and mechanisms to review and reform national laws and policies.

In Dhaka, a successful workshop on HIV/AIDS and STDs for parliamentarians was held in September-October 1997 by ACTIONAID, an NGO, and the government AIDS Prevention and Control Programme. It included a presentation by peer educators of sex workers at the Tangail brothel.[80] The objectives were to create an environment where participants felt at ease to talk, to bridge the gap between lawmakers and activists, to share prevention and management interventions, and to identify areas where lawmakers could contribute at the policy level, in Parliament and in the local area they represent.

Democratically elected parliamentarians are in a unique position to influence public opinion and lead their constituents towards attitudes that are supportive of an effective national and regional response to the epidemic. Political commitment is an essential ingredient to a rights-based response to HIV/AIDS and to the allocation of adequate resources to implement it.

## 4.9 Conclusion

The impact of the epidemics of HIV/AIDS on individuals and communities has thrown light on the complex intersections between human development, human rights and health. While these domains are organically intertwined, there has been a tendency to lose sight of this interdependence. This has led to the evolution of philosophies, vocabularies, research and activism that have virtually excluded one domain from the other. The emerging global recognition that human rights are a potent approach to defining and advancing human development and well being, calls for increased communication and interaction between the fields of human development, rights and health.

> *"Let us resolve to replace stigma with support, fear with hope, silence with solidarity. Let us act on the understanding that this work begins with each and every one of us."*
>
> Kofi Annan, UN Secretary-General, World AIDS Day, 1 December 2002

# The Way Forward

*"The social and political circumstances not only intensify the risk of exposure to HIV but bear on the options to respond adequately to the problem"*

Her Majesty Queen Ashi Sangay Choden Wangchuk of Bhutan in a keynote address at the Satellite Symposium on Rights, Gender and HIV: Lessons from South Asia at the 6th International Congress on AIDS in the Asia Pacific (ICAAP), October 2001

*"It is time for leaders in South Asia to speak out on HIV/AIDS. One of the most serious obstacles is the silence and stigma surrounding the disease. HIV/AIDS concerns the most private and personal area of our lives... You, as leaders at so many different levels, must look at reality honestly and openly and speak clearly in response" .*

Dr Nafis Sadik, Special Envoy of the UN Secretary-General of HIV/AIDS in Asia at the South Asia High Level Conference 'Accelerating the Momentum in the Fight Against HIV/AIDS in South Asia'. Kathmandu, Nepal, February 2003

Chapter 5

# The Way Forward

## 5.1 The Context of HIV and Human Development: Policy Challenges for South Asia

The foregoing chapters have highlighted the gravity of the challenge of HIV/AIDS in South Asia and the urgency of addressing the epidemic within a human development framework and a rights-based approach. It is, therefore, imperative that HIV be treated as a mainstream issue rather than a purely health issue. An effective response towards the epidemic must be based on the realisation that South Asia is indeed on the threshold of an unparalleled AIDS epidemic.

The epidemic is becoming generalised in many parts of the region, and focused public action that goes beyond a purely medical or communicable disease approach is needed to tackle it. HIV/AIDS has a major impact on human development attainments, especially of the poor and marginalised communities/groups, including women. At the micro-level, it has a significant impact on individuals, households and firms. Till now, the macro-economic impact of the epidemic in South Asia has been relatively low compared to the situation in sub-Saharan Africa. However, since the structural determinants of HIV prevalence such as high levels of poverty, migration, illiteracy, ill-health, gender inequality and urbanisation are widely present in South Asia, the region can ill-afford to wait for a full-blown crisis. The mutually reinforcing relationship between HIV and human deprivation in South Asia needs to be brought at the centre of all efforts to combat the epidemic.

The most important lesson for South Asia is about fighting the epidemic right now to prevent it from reaching catastrophic proportions. National responses should not wait for HIV/AIDS cases to soar. Commitment to checking the spread of HIV has to be imbued with a sense of urgency. The cost of trying to reverse the upward trend of the epidemic once it reaches the 1 per cent level will have serious implications in terms of human lives and resources.[1]

Given the early stage of the epidemic in South Asia, it is important to address the structural factors such as poverty and livelihood, gender and human rights, for effective prevention, care and support. In order to do this, it is essential to get the epidemic out of the "public health" box and address it as a mainstream development issue. The elements of such a response would include:

- provision of livelihood and social security for PLWHA and vulnerable groups;

- empowerment of women to ensure greater control over their bodies, better sexual negotiation and avoidance of opportunistic infection;
- public education to reduce 'fear and loathing', which is at the heart of stigma and discrimination and link mobilisation of positive people with wider social movements; and
- improved management of the economy to address issues stemming from globalisation like vulnerability of local livelihoods, healthcare access and affordability and drug pricing regimes in the age of TRIPS.

The policy and regulatory framework must be simultaneously widened, to ensure that:

- access to basic services for positive people is guaranteed;
- AIDS strategies go beyond public communication and media advocacy; and
- human rights of PLWHA are respected, with changes in laws and penal codes to ensure their decriminalisation.

*While there is general agreement that the HIV/AIDS epidemic calls for policy intervention, there is considerably less clarity about the appropriate content of any such policy response.*

## 5.2 Policy Action for HIV/AIDS

While there is general agreement that the HIV/AIDS epidemic calls for policy intervention, there is considerably less clarity about the appropriate content of any such policy response. Should it be a purely technical intervention? Should other goals be pursued as well? Who should participate in "delivering" the intervention?

Countries have experimented with a number of policy approaches, incorporating one or more of the above characteristics, in the two decades since the onset of the epidemic. These have ranged from the screening of donated blood, HIV testing of individuals (voluntary or forced), counselling, subsidised provision of ARV drugs, needle exchange programmes, removal of PLWHA from proximity to populations at risk, subsidised condom distribution, prevention messages (through the mass media and peer groups), and social and economic empowerment schemes. Sometimes, the primary goal has been to reduce HIV infection, but at other times, additional goals—such as economic betterment and protection of human rights—appear to have been incorporated as well. The government has played a central role in executing some interventions, whereas others have been conducted under the auspices of the private for-profit and non-profit sectors. Still others have been undertaken as partnerships between the private sector, the government and NGOs. Groups targeted for intervention have been involved in the design and execution of policy in some cases, while that has not been the case in others.

To the extent that HIV/AIDS has an adverse impact on economic indicators and other socially desirable goals, policy action is necessary early in the epidemic, rather than later. The question of appropriate policy is also relevant here. One objection to policy action is that individual (or private) actions act to neutralise government policy, so the net outcome of the policy intervention ends up being rather small. For example, a country may have a policy of subsidising HIV testing of blood for transfusion. Assuming that, in the absence of any government policy, individuals would actually have paid for testing of blood, the only impact of the policy of subsidising HIV tests is a transfer of public resources to individuals using transfused blood, with no influence on HIV. Therefore, unless there is a clear assessment that such a transfer is beneficial to society, the policy

is not a desirable one. Sometimes the effects of a policy can even be the opposite of the intended effects as, for example policies that seek to identify and imprison PLWHA.[2] In this case, individuals who might otherwise have visited formal health facilities avail of HIV counselling and learn methods to reduce the risk of infection to others, may choose not to do so. This may, therefore, enhance HIV transmission, instead of the intended policy effect of reducing it.[3]

Even if concrete evidence on some aspects of the economic impact of HIV/AIDS is not readily available, there are enough reasons for making investments in an HIV/AIDS policy. The first is, simply, the human development costs of the epidemic, as indicated by the negative effects of stigma and the loss of key adult members of individual households at the micro-level, and overall declines in life expectancy at birth in the worst-affected countries at the macro level. There are also measurable economic impacts such as large medical expenditures on treating PLWHA that use up resources that could have been used elsewhere in the absence of AIDS.

However, to justify spending more on policies to address HIV/AIDS, it is important that investments in AIDS prevention and treatment be compared to investments in other (health and non-health) sectors.

## 5.3 Emerging Policy Issues for HIV/AIDS and Human Development in South Asia

The future of public policy on HIV/AIDS and efforts to combat the epidemic in South Asia will increasingly be influenced by a number of emerging critical issues, three of which are highlighted in this section. The first is the role of stigma and discrimination in affecting care and prevention strategies. The second is the special requirements of policy initiatives in regions of conflict, and the ways in which conflict affects the spread of HIV/AIDS. The third issue is the question of access to ARV drugs as the region battles the disease.

### 5.3.1 Stigma and discrimination: rationale for action

The stigma and taboos surrounding HIV in most South Asian societies have prevented open discussion of HIV/AIDS, making the epidemic socially invisible and leaving individuals ignorant about the causes and how they can protect themselves and others. It has also made large sections of society consider themselves behaviourally immune to HIV, a disease they perceive as only attacking stigmatised 'others' like sex workers, men who have sex with men, injecting drug users etc.

In the light of these damaging consequences, it is clear that stigma and discrimination need to be urgently addressed both in order to ensure effective responses to the epidemic, as well as to guarantee the human rights of PLWHA. Challenging stigma and discrimination is thus increasingly becoming a priority for governments, civil society and inter-governmental organisations.[4]

*To justify spending more on policies to address HIV/AIDS, it is important that investments in AIDS prevention and treatment be compared to investments in other (health and non-health) sectors.*

#### Effective responses: the need for measurement and disaggregation

There have been relatively few sustained or effective responses aimed at challenging stigma and discrimination within the region. This is partly because it has been difficult to measure and prove results in this area and also because the factors that influence stigma and discrimination, and the interplay between them, are rarely explored. As a result, responses have not addressed the

root causes of stigmatising attitudes or discriminatory practices and, therefore, have limited effectiveness.

The gap in useful data on stigma and discrimination is now being recognised as a serious problem. A UNAIDS research study on HIV-related stigma and discrimination in India and Uganda noted that "relatively little systematic research has taken place on the *forms* that HIV/AIDS related stigmatisation and discrimination take, the different *contexts* in which they occur and their varying *determinants*".[5] Current interventions, initiated largely by NGOs, tackle stigma and discrimination by applying the human rights standards as outlined by various human rights mechanisms. They, however, require benchmarks for action so that progress can be monitored more systematically.[6]

*Responses have not addressed the root causes of stigmatising attitudes or discriminatory practices and, therefore, have limited effectiveness.*

Besides, by focusing on the human rights approach, many stigma and discrimination-related initiatives lose the priority of the two main public health effects:

- stigma results in denial, leading to inaccurate disease surveillance, severely restricting the ability to assess and plan health needs appropriately; and
- stigma and discrimination decrease the access to treatment and counselling services.[7]

In order to effectively tackle the problem, simple research methods are needed that will provide precise and measurable data about the levels of stigma and discrimination and the underlying components (e.g. fear, moral judgement etc.) that inform them, as well as the correlations and linkages between these components. Such a disaggregated and detailed understanding of both the levels and operation of stigma and discrimination would allow the development of tailored, effective *sensitisation* programmes.

The key elements of successful programmes tackling stigma and discrimination are[8]

- analysing of the causes and effects of stigma and discrimination;
- communication and education aimed at changing attitudes and behaviour, not just imparting knowledge;
- establishing a more equitable policy context;
- giving top priority to tackling legal challenges;
- safeguarding the dignity and rights of individuals and marginalised groups;
- addressing the issue from a human rights framework;
- empowering communities through a participatory process;
- social marketing;
- social mobilisation;
- sensitising and involving leaders (government, religious and community) to create a more open society;
- involving marginalised groups and PLWHA networks in forming policy, designing and implementing programmes and allowing them to build 'new identities' within society; and
- identifying both prevention and care/support.

### 5.3.2 Conflict and development in South Asia

The South Asian region is torn by civil and military conflict, both within countries and across borders, and has large refugee populations. Though there have been few studies that establish a direct link between conflict situations and the spread of HIV, civil and military strife do aggravate the various factors that fuel the epidemic. At a general level, conflict situations disrupt

development, divert scarce resources away from social and developmental spending to military expenditure, displace people, throw normal administrative structures and processes out of gear, and violate human rights. All these factors aggravate the conditions that contribute directly to the spread of HIV. Women and girls become more vulnerable to gender violence and sexual exploitation and they are less able to negotiate safer sex. Multi-partner sex is common, as sexual relationships become more transitory. Such sexual activity is often without condoms, the easy availability of which becomes a problem. The breakdown of health infrastructure results in STIs not being treated, testing of blood not being done and drugs not being available. The presence of international peacekeeping forces can also be the source of a new local epidemic. Conflict also places innumerable hurdles in existing HIV/AIDS prevention efforts.

### Effective responses: addressing the underlying causes

The spread of HIV/AIDS in conflict situations cannot be addressed in isolation. As in the case of other responses to the epidemic, this too has to be located within a larger developmental framework. Thus, any response will have to first address the underlying causes of conflict. It must also deal with providing care and support to PLWHA in conflict situations. The key elements of such a strategy would be:

- undertake research to analyse the link between conflict situations and the spread of HIV;
- Address the underlying causes of conflict and social tension by:
  - dealing with issues relating to livelihoods, ethnic, religious and linguistic minorities;
  - promoting developmental policies that do not lead to displacement, ensure balanced regional development and do not harm the environment; and
  - ensuring a more meaningful and participatory democracy by strengthening grassroots political institutions.
- Undertake focused action using a compassionate and caring approach to HIV/AIDS in actual conflict situations. Such programmes must deal with:
  - educating women about their reproductive and sexual health rights;
  - ensuring representation for women in conflict resolution activities;
  - designing awareness programmes regarding HIV/AIDS and sexual health for both sexes;
  - ensuring humanitarian norms in regard to treatment of women and children in conflict situations; and
  - enhancing awareness in the armed forces about HIV/AIDS

*The breakdown of health infrastructure results in Sexually Transmitted Infectons not being treated, testing of blood not being done and drugs not being made available.*

## 5.3.3 Treatment, care and support

The mainstay of efforts to respond to the epidemic in the South Asian region at the present time consists of public education, voluntary counselling and testing, condom promotion and the treatment of STIs and opportunistic infections. However, in the absence of a vaccine or a cure for HIV infection, the need for taking up access to treatment as an integral part of the common agenda for human development and HIV prevention is increasingly being recognised. Access to treatment comprises several elements, including the quality and scope of healthcare infrastructure and equipment, the availability of trained medical personnel and the availability of high quality affordable medicines.

Significant strides have been made over the last decade in developing a range of ARV drugs to control HIV infection and this has made an enormous difference to the way HIV/AIDS is treated. However, the high cost of these drugs makes access to them a major problem in developing countries, including those in the South Asian region. Till December 2002, only 4 per cent of the 1 million people who needed therapy had access to HAART. The situation is likely to get exacerbated with the coming into effect of the TRIPS Agreement. The Agreement will require countries to legislate strict patent laws, which will only further restrict the availability of drugs and make them more expensive.

*Improving access to Anti-retroviral Therapy and care for HIV infection and AIDS needs to be logically integrated with HIV prevention programmes.*

There is also concern over the effectiveness of ARV treatment without adequate supervision or health infrastructure. Fears of drug resistance fuelled these concerns and led to questions regarding whether ARV treatment was an appropriate policy response in poor countries.

### Effective responses: attempting synergies and building capacities

The UN Declaration of Commitment endorses HIV prevention and care as being at the core of the larger response to the epidemic. This suggests that the detection and treatment of HIV infection and associated opportunistic diseases is important. The increasing availability of ARV drugs also makes it clear that it would be unethical to withhold life-saving therapy. Most importantly, the Declaration endorses the commitment of countries to come to terms with the issue of providing HIV treatment.

ARV drugs are not a cure for HIV infection. Improving access to ART and care for HIV infection and AIDS needs to be logically integrated with HIV prevention programmes. Offering a mix of voluntary counselling and testing, ART and treatment for opportunistic illnesses will be a stepping stone to expanding prevention efforts, as this larger gamut of services will cover a larger number of those infected and those at risk.

Developing countries standing on the threshold of ART need to ensure that their prevention programmes do not get isolated from care programmes. In some developed countries, the gains of ART in terms of reduced morbidity and mortality is being neutralised by stable or even increasing rates of HIV transmission.

In addition, treatment for HIV needs to be utilised as an additional impetus for upgrading sustainable health delivery in toto, rather than being seen as an extra burden on the health budget.

The WHO Commission on Macro-economics and Health calculated that an outlay of $66 billion per year on healthcare and services in developing countries would save about eight million lives a year by preventing or treating diseases such as HIV/AIDS, malaria and TB. The resultant economic benefits of sustaining the health of the working population and lowering future medical costs were estimated to touch $360 billion a year by 2020.

There is a mounting body of evidence regarding the positive association between investments in health and economic growth, indicating that a healthy population is as much a precondition for growth as a product of it. The response to HIV/AIDS, including HIV treatments, needs to be at the core of public policy, poverty reduction strategies, action for sustainable development and the preservation of human security.

Providing ARV treatment in resource limited settings is possible, once the right capacities are built up. A strong generics drug industry provides much-needed competition to branded products and is a key element in ensuring affordable access to medicines. There is scope for technical cooperation among countries within and outside the region. In 2001, one such attempt was made with discussions between the Pakistani and Indian pharmaceutical industry on transfer of technology, machinery and plant equipment from India to Pakistan for bulk production of generic drugs.

Countries like Bhutan and the Maldives, which do not provide the economies of scale for mass production and depend entirely on imports, must collaborate with generic drug producers in the region to source their requirements. Compatible legislation in both producing and importing countries is essential to allow for such collaborations. Countries that require import of ingredients also need to ensure that their laws are in compliance with international agreements and, at the same time, allow imports from generic producers without violating these agreements.

Issues of quality control also need to be addressed. The WHO, together with UNAIDS and UNICEF, took an important step in this direction in March 2002, when it released the first list of safe HIV/AIDS drugs and suppliers. The list, which is being regularly updated, includes both generic and research-based companies, ARVs and drugs for opportunistic infections. Two Indian generic producers were included, reducing concerns over the quality of locally produced HIV/AIDS drugs. The WHO list highlighted the importance of quality control being an integral part of the technical capacity building exercise to set up a competitive generic industry.

Issues relating to drug quality and effectiveness of ARV in resource-limited settings have been addressed in several studies by the WHO and independent medical researchers. The WHO, which estimates that ART can be extended to 3 million people by 2005, has documented treatment regimens that are designed specifically for resource-poor settings and set out guidelines for such treatment. These guidelines outline when to start ART and describe recommended first-line and second-line ARV regimens for specific subgroups of patients. The guidelines also recommend the setting up of a parallel HIV drug resistance sentinel surveillance system and "innovative strategies for enhancing adherence to ART".

There are lessons to be drawn from the success of DOT in TB control programmes. While there are few studies to show that adopting a DOT approach will work in HIV/AIDS programmes, it could be attempted for some subgroups of PLWHA.

UNAIDS has documented a number of case studies that show that the effectiveness of ART in reducing morbidity and mortality in developing countries such as Thailand, Uganda, Brazil and Senegal is comparable to that in high income countries. Managing ARV treatments at district-level hospitals in South Africa, Kenya, Uganda and Senegal has proven to be feasible, though not simple.[9] Further, research on ARV regimens in resource-poor settings is continuously evolving. Though the sample sizes in pilot projects have been small, the evidence so far has been encouraging and needs further work. For the South Asian region, this is particularly

*A strong generics drug industry provides much-needed competition to branded products and is a key element in ensuring affordable access to medicines.*

important since evidence from other regions, though useful, is not adequate to devise appropriate ART strategies.

Along with care and prevention, access to treatment is an essential part of the battle against HIV/AIDS. The implications of international trade treaties such as TRIPS and technological capabilities underscore the need for a multi-pronged approach to tackle the disease. The elements of such an approach are:

- ensuring prevention programmes and care programmes work in tandem and not in an isolated manner;
- studying the feasibility of providing HAART through DOT and applying it where it is found to be successful;
- encouraging technical cooperation among countries in the region to make ARV drugs available;
- encouraging public-private partnerships to offer ARV drugs at reasonable prices;
- encouraging pharmaceutical companies to take up differential pricing for developing countries to make the drugs more affordable;
- adopting a larger public health approach and strengthening the general health infrastructure; and
- placing HIV/AIDS at the centre of development strategies and public policy.

*The implications of international trade treaties such as TRIPS and technological capabilities underscore the need for a multi-pronged approach to tackle the disease.*

## 5.4 Addressing Drug Use

The expansion of injecting drug use in South Asia has been a factor in the spread of HIV/AIDS in the region. The infection spreads through the use of shared needles and also through the sexual route to the wives and sexual partners of injecting drug users.

Much of the official response to injecting drug use has been to de-emphasise its social importance and stigmatise users as marginal members of society. Women injecting drug users are heavily stigmatised. As with other aspects of HIV/AIDS, the drug connection has not yet become a part of the official dialogue and response in many countries. Throughout the region, drug use is illegal and this leads to harassment by the police. This only prevents injecting drug users from availing of counselling and treatment services.

Most countries offer some detoxification services, but a wider set of harm-reduction programmes that focus on both drug abuse and HIV infection hardly exist, with just one notable exception. Despite drug use being illegal in India, the northeastern state of Manipur has undertaken harm-reduction services on an experimental basis in an attempt to reduce the vulnerability of injecting drug users. The programme includes needle exchange and education about sterilising drug equipment. This is the only needle exchange programme operating in the country.[10] The results have been positive, with a one-third decline in HIV infections among injecting drug users between the mid and late-1990s.

### Effective responses: focusing on harm reduction

Given this background, the potential exists both for HIV to spread beyond injecting drug users and for a range of actions by policy makers and influential authorities. The policy response must involve the following:

- recognising that injecting drug use is a factor in national HIV epidemics;
- ending the prevailing discrimination and marginalisation of injecting drug users, with legal reforms, where necessary; and
- taking up harm reduction strategies, including needle exchange programmes and education about sterilising injecting equipment.

## 5.5 Adolescent Sexual Health Needs

The fact that adolescents are sexually active is a reality most South Asian societies tend to deny. Despite high levels of sexual activity, adolescents were found to have limited knowledge about STDs, RTIs and HIV. Ignorance about sexual health issues makes them less able to make informed choices about safer sex and, hence, increases their vulnerability to HIV/AIDS. The problem is compounded by the fact that, across the region, policy makers and opinion leaders disapprove of efforts to increase adolescents' knowledge about sexual health and see it as polluting young minds. Girls are especially vulnerable since they have little control in sexual relationships and are not supposed to be aware of sexual matters. Some countries like India, Bangladesh, Sri Lanka and Nepal are making attempts to make youth aware of sexual health issues and improve reproductive health services but such efforts are not systematic. Sri Lanka stands out as the only country whose Population and Reproductive Health Policy has specific provisions about adolescents.

Moreover, a large number of young people also form part of mobile populations, with associated vulnerabilities.

### Effective responses: acknowledging the problem and addressing it

Any effort to check the spread of HIV among the youth has to first acknowledge the fact of adolescent sexuality. The other elements of the strategy to reduce the vulnerability of youth should be:

- Undertaking IEC programmes that will increase the awareness of youth about matters relating to sexual health; and
- addressing gender inequalities and disempowering norms in life skills programmes.

## 5.6 Towards Gender Justice and Empowerment

Over the last two decades, responses to issues related to gender and HIV have been intensified to address the problem multi-sectorally and to take on more issues as the epidemic continues to spread. Issues such as mother-to-child transmission, access to treatment, access to more information and legal rights have been taken up at various levels by governments, civil society organisations and international bodies. While gender is the underlying issue inevitably addressed by most of these interventions, a specific analysis of gender-centred responses is necessary.

The inequalities in societies in South Asia are most manifest in the field of gender relations. Policies and practices designed by or enforced by men curtail female access to education and information, healthcare, decent work, proper nutrition, and security. Though many South Asian countries are making progress in promoting women's access to social services and involvement in decision-making, there is still strong social resistance to such changes both within governments and major social institutions such as religious groups and businesses.

One area in which limited progress has been made is the violence against women, especially by men. From public beatings and executions (Afghanistan), to trafficking in young women (seemingly, in all the countries of South Asia), to domestic violence (in all the countries), women are regularly sexually intimidated and sexually abused. In Bangladesh, as in other countries, "male authority over women's sexuality is socially accepted… and reflected in violent behaviour within marriage."[11] In Pakistan, a 1987 study by the Ministry of Women's Development

*Any effort to check the spread of HIV among the youth has to first acknowledge the fact of adolescent sexuality.*

indicated that domestic violence takes place in approximately 80 per cent of the households.[12] Violence also is expressed in less direct ways, such as denying women and adolescent girls adequate and appropriate information about RTIs and STIs, about the female condom, or about risks of HIV infection. The association of commercial sex workers with HIV transmission, without reference to the reasons why women are involved in sex work, contains built-in biases and contributes to further discrimination in providing them with various services. For women and girls from low-income groups, the violence of sexual exploitation is a real or potential outcome of struggling to survive in difficult economic circumstances. Social and economic disruptions increase the likelihood of what is sometimes called "survival sex"—exchanging sexual favors for food, small amounts of money, or temporary security.

*Focusing on those issues that disempower women runs the risk of diverting attention away from those areas of women's lives where they are capable of ordering the world differently.*

The result of inequitable gender relations is higher risk of HIV transmission, for women and men, and countries as a whole. Limited literacy and access to non-written forms of information prevents both men and women from becoming aware about HIV/AIDS and how it can be prevented. These factors also increase the likelihood of misunderstandings, setting the stage for stigma and discrimination and the further spread of HIV. If the pattern seen in Africa is subsequently replicated in South Asia, women are likely to suffer increased domestic violence and stigma if and when they reveal they are HIV positive.

The prevention, care and support needs of men and women are different, not just because of their physiology but more importantly in the context of gender roles and relations. Programmes that foster the development of women-controlled prevention technologies is one such example. Providing women with female condoms and micobicides are gender sensitive efforts which need more encouragement in the region.

On the other hand, there are also programmes that have recognised the unique vulnerabilities that men are faced with. The Healthy Highways project in India was one such effort to reduce the vulnerability of truck drivers, crew members and their paid sexual partners to STDs and HIV/AIDS. The response to the programme was positive as men welcomed the services and expressed an eagerness to get more information. The project is implemented through 30 NGOs and 18 transport companies.

It is well accepted now that a multi-sectoral response is the need of the hour. This, in turn, demands that policies and programmes comprehensively address issues that foster gender inequality and vulnerability. Coercive programmes and policies not only violate individual rights but invariably do not elicit the desired results. There is need to provide greater access for women and girls to productive resources such as education, employment, legal assistance, dispel the culture of silence and shame that surrounds sexuality, and protect girls and boys from adverse effects of gender stereotyping.

Much of the analysis and description of HIV and women is couched in the language of "vulnerability", which is not an operationally useful concept if the reality of women's lives have to be changed.[13] Focusing on those issues that disempower women runs the risk of diverting attention away from those areas of women's lives where they are capable of ordering the world differently. It has been argued that if the conditions of

women's lives are to be changed in ways that will make a fundamental difference to the global experience of HIV/AIDS, it would be desirable to learn from policy areas where outcomes are clearly beneficial and apply these to the global response to HIV.[14] The population policy in parts of South Asia has been cited as a good example of this. However, these lessons cannot be directly applied to different situations. At best, they point the way forward and are evidence of what can be achieved through policies and programmes that are relevant and effective.

There is general agreement that high fertility imposes unreasonable burdens on women and that reductions in family size lead to improved standards of living for all members of the family. Moreover, there are gains for society in general through reductions in the level of poverty and a better educated and more healthy younger generation who grow into more productive adults. There are also gains to the State in the form of faster economic growth and lower rates of public expenditure (in areas such as education and primary healthcare).

As in policies for HIV/AIDS, the problem lay, in part, in putting in place those policies that would be effective in supporting women—and to some extent men—in limiting family size. This meant changing a world in which women have traditionally had little or no voice over matters relating to fertility. The argument, quite simply, is that if women were given more voice and more power they would choose lower rates of fertility, as a result of which there would be profound outcomes for women and children and substantial social benefits. Similar arguments could be made in the case of HIV/AIDS responses as well.

### Effective responses: changing the dynamics of gender relations

As long as gender inequality exists, women's rights and opportunities to resist the infection, to assert their reproductive choices, to demand safer sex and to support their families will be threatened and the epidemic will grow in scope and impact. A range of policy-makers and service providers need to take up strategic gender interests and power dynamics to seek effective solutions. Some of these steps would include:

- creating gender-specific information in simple language;
- providing gender-sensitive individual and group counselling services;
- providing widespread sex education services and programmes with adolescents;
- sensitising and training healthcare professionals;
- imparting more information to the affected groups on women's rights;
- empowering women through capacity building interventions;
- involving men as partners; and
- ensuring that programmes encompassing care take into account the fact that women have no support and care facilities, and providing adequate care and support services

*High fertility imposes unreasonable burdens on women and that reductions in family size lead to improved standards of living for all members of the family.*

## 5.7 Strengthening Partnerships

The challenge of HIV/AIDS, and the need to address the epidemic at multiple levels in order to ensure a comprehensive response, requires the development of innovative partnerships and dynamic networks that will work in a collaborated manner. This involves bringing together partners from different sections of society—government, media, civil society organisations, private sector, UN agencies, donors and PLWHA—and moving beyond the focus on traditional

public–private partnerships. Such an approach will, for example, explore how the private sector and media can support the work of civil society organisations or how PLWHA can play a role in government initiatives.

The field of HIV/AIDS has seen examples of collaborative initiatives, although far more needs to be done. These initiatives have clearly demonstrated that innovative partnerships can enhance outreach and effectiveness by pooling different strengths and reaching multiple constituencies through coordinated action. Such examples include the path-breaking work done by advocacy groups, PLWHA groups, research institutions, service providers, NGOs and the media.

*Innovative partnerships can enhance outreach and effectiveness by pooling different strengths and reaching multiple constituencies through coordinated action.*

Social mobilisation is at the heart of any strategy for reducing the spread and impact of the epidemic. Lessons emerging from implementation have demonstrated the need to link these efforts at the micro-level with broader issues of poverty, gender equality and governance at the macro-level. This can only be done through creative and dynamic partnerships within and between sectors that allow multiple actors to work together to produce results.

### Alliances within civil society

The issue of access to treatment is a clear example of civil society organisations coming together to form strong and effective alliances. In April 2001, 39 pharmaceutical companies dropped their case against the Government of South Africa,[15] allowing the government to import ARV drugs. This withdrawal came after unprecedented public pressure due to the campaign for access launched by several national and international civil society organisations. Prominent among these were Medicins Sans Frontieres which won the Nobel Peace Prize in 2000, Treatment Action Campaign (TAC) and Oxfam International. The work of civil society partnerships in this area also extended this pressure to policy makers and the sustained campaign world-wide to provide affordable drugs to poor people paved the way for the Doha Declaration on TRIPS and Public Health in November 2001. In December 2001, TAC won a court case against the Government of South Africa, leading to a government commitment to provide Nevrapine to prevent MTCT, another example of civil society collaborating across borders to inform public policy.

South Asia has seen the development of several innovative partnerships between sex workers' organisations and NGOs/community-based organisations working on several gender-related issues, such as anti-trafficking. These partnerships have resulted in the formation of regionally replicable models of 'self regulatory mechanisms' at destination sites, which curtail the trafficking of minors and persons coerced into sex work and reduce their vulnerability to HIV. The success of the Sonagachi project in Kolkata, India, and the various sex workers' collectives in Bangladesh in strengthening HIV/AIDS responses have demonstrated the significant impact such partnerships have on sustaining integrated and rights-based responses.

### CSO–private sector partnerships

A non-profit organisation, Family Health International's (FHI) manual titled, *Workplace HIV/AIDS Programs: An Action Guide for Managers* (2002) aims to develop and sustain effective partnerships between the private sector, labour unions, managers and medical personnel. The manual is designed for use by companies' human resources managers, medical officers and union representatives. It provides

comprehensive guidance in assessing the real and potential impact of HIV/AIDS on companies, in developing an HIV/AIDS policy to cover the workplace and in designing and implementing HIV/AIDS prevention and care programmes for the workplace. The guide also includes examples and case studies of how other companies have responded to the epidemic.

The ILO has also undertaken initiatives to address the issue of HIV/AIDS at the workplace. It formally launched a pioneering *Code of Practice on HIV/AIDS and the World of Work* at the UNGASS. "This code focuses on the world of work

56 Pradhan, 1998
57 Malla, 2001
58 World Bank 2002b
59 Articles 25, 26 and 27, Part II, Constitution of the Islamic Republic of Pakistan
60 World Bank 2002b
61 World Bank 2002b
62 Ordinance no. XL of 1981
63 Article 25(1) (a) Chapter III, The Constitution of the Republic of Sri Lanka
64 Article 11(2) Chapter III, The Constitution of the Republic of Sri Lanka
65 A doctor who acquired HIV from a blood transfusion in a semi-government hospital was told to find another job. (Samath, 1997)
66 Samath, 2001
67 www.youandaids.org
68 World Bank, 2002b
69 Statement by Ali-Akbar Sayyari , Islamic Republic of Iran at the Special Session of the United Nations General Assembly on HIV/AIDS, 25 June 2001
70 Government of Pakistan, Ministry of Health and UNAIDS, 2000 World Bank, 2001
71 World Bank, 2002b
72 UNAIDS, 2002
73 World Bank, 2002a citing 1998-99 National Sero-surveillance data
74 Some of the information is adapted from Roque and. Gubhaju, 2001
75 Iran News, July 24, 2001
76 Trang, 1999
77 *Iran News*, October 20, 2001
78 Agence France-Presse, 2000
79 Maldives Human Development Report, 2000

## Chapter 4

1 Some examples are the United Nations Declaration of Commitment, June 2001 and the Government of India's National AIDS Prevention and Control Policy
2 25 November 2000
3 Albertyn, 2000
4 U.S Committee for UN Population Fund, 2002 (http://www/uscommittee.org/issue5_0.html)
5 Australia, for instance, saw a great decrease in HIV/AIDS incidence when it introduced a legal regime that protected the rights of those most at risk – sex workers, injecting drug users – and integrated PLWHA and vulnerable groups by empowering them with information, access to services, decriminalisation, harm reduction etc.
6 The Goa Public Health (Amendment) Act, 1985 of the Indian state of Goa put anyone testing positive for HIV under mandatory isolation. This was later amended to make such isolation discretionary.
7 The Indian government has now adopted an integrationist model in its National Aids Prevention and Control Policy.
8 Sabatier, 1988
9 Kirby, 2000
10 Justice Michael Kirby of the High Court of Australia at the plenary session on "Partnerships Across Borders Against HIV/AIDS", 4th International Congress on AIDS in Asia and the Pacific, Manila, Philippines, 28 October 1997
11 Crandall and Moriarty, 1995
12 Bharat, 1999; Gilmore and Somerville, 1994
13 CHANGE & ICRW, 2002
14 Goffman, 1963, defines stigma as a 'significantly discrediting' attribute.
15 UNDP & Sahara, 2002
16 Mr. X V. Hospital Z, [1998] 8 SCC 296
17 Resolution 49/1999
18 According to MHHDC 2002, Maternal Mortality Ratio (per 100,000 live births) 1985-1999 weighted average is 492 for South Asia (excluding Afghanistan and Iran)
19 According to the Pakistan-based Lawyers for Human Rights and Legal Aid (LHRLA), every year hundreds of women, of all ages and in all parts of the country, are reported killed in the name of honour. During the first eight months of 2002, 549 women became the victims of barbaric custom of Karo Kari (literally black man, black woman) in Pakistan and all the cases received wide publicity. Research by LHRLA showed that the real number of such killings is far greater than the number reported in the national print media. Honour killings are no longer only reported from remote rural areas but also-though less frequently-from towns and cities. The modes of killing vary, with people being hacked to pieces in Sindh, often in view of and with the implicit or explicit sanction of the community. In the province of Punjab, such killings occur in an urban setting and appear based more on individual decisions. The killings are usually carried out by shooting and are not always carried out in public.
20 The text in this and the subsequent section draws heavily from Rivers and Aggleton, 1999
21 Petchesky & Judd, 1998
22 Chinnock, 1996
23 McKenna, 1996
24 Silva et al., 1997
25 Bandhu, 2002

26 ILO, 2000
27 FAO, 1995
28 UNDP, 2001a
29 USAID Bangladesh, 2003
30 CATW, 2002
31 STOP, 2002
32 World Bank, 2002b
33 UNAIDS. It must be noted that the figures quoted here are from 1995 because no authenticated data are available for Afghanistan since 1995.
34 Simkhada, 2002
35 ODI, 1999
36 Law made by judges through their decisions in the absence of statutes, which then become precedents and binding law
37 Articles 27, 28, 32 and 43, Constitution of the People's Republic of Bangladesh
38 Article 22, Part 3, The Constitution of the Kingdom of Nepal
39 Al-Suood, 1995
40 Reid and Costigan, 2002
41 Article 1, Law on Combating Drugs, 1991.
42 Taking depended drug users off drugs without decreasing doses slowly resulting in severe withdrawal symptoms
43 UNDCP, 1999b
44 Dr. Bayram Yeganeh, Director, Iran National AIDS Prevention Committee (www.aegis.com/news/ips/2001/IP010303.html-)
45 Human Rights Watch, 2002
46 Lawyers Collective HIV/AIDS Unit, an Indian NGO, has itself filed approximately 80 such cases in the last four years in various Indian courts.
47 *Hindustan Times,* November 13, 2002
48 Johari, V. and Divan, V., 2001
49 Khanna, A. and Salvi, S., 2001
50 Shreedhar and Colaco, 1996
51 Glick, 1993; Jayasuriya, 1995.
52 Healthcare workers are at risk of occupational exposure to HIV. Exposures occur through needle-sticks or cuts from other sharp instruments (percutaneous exposures) contaminated with an infected patient's blood or through contact of the eye, nose, or mouth (mucous membrane) or skin with a patient's blood.
53 www.regentsparkclinic.com/Post_Exposure_Prophylaxis_HIV.php
54 Grover, 1993
55 Goonesekere, 1998
56 HAART suppresses viral replication to virtually undetectable levels in blood tests. HAART also leads to the gradual replacement of CD4 lymphocytes. Therapy is usually begun when the patient is diagnosed with clinical AIDS, irrespective of CD4 cell count, or has a CD4 cell count below 200 cells/mm3, or is diagnosed with WHO Stages II or III HIV disease with a total lymphocyte count below 1200/mm.3. Thus, only a certain proportion of a country's population of people living with HIV will require ARVs at any given time. ARVs work in different ways. Some inhibit the viral replication process. Others prevent the entry of HIV into CD4 lymphocytes. HIV replicates itself with the help of two enzymes known as reverse transcriptase and protease. The first class of Anti-retroviral drugs work by inhibiting one or other of these viral enzymes and are, therefore, known as reverse transcriptase and protease inhibitors. Certain other ARVs belonging to the second category intervene relatively early in the infection process. These drugs, known as fusion inhibitors, work by blocking the fusion of HIV with the CD4 T lymphocyte, thus preventing the entry of the virus into the T cell.
57 UNAIDS/WHO, 2002
58 Dr Joep Lange, President, International AIDS Society, at the launch of the International HIV Treatment Access Coalition in Geneva, December 2002
59 Marseille et al., 2002
60 Parallel importation of drugs allows individuals or bodies to import generic drugs to the country in spite of branded drugs of the same generic being sold in the country by agents of the main producer. The parallel drug importation allows the customer the choice of a wide range of generic drugs at a lower price
61 UNDP, 2001
62 Pharmaceutical Research and Manufacturers of America estimates R&D costs at $500-800 million
63 The types of intellectual property protected under TRIPS include copyrights, trademarks, geographical indications, industrial designs, integrated circuits, patents and trade secrets.
64 Fink, 2000; Watal, 2000
65 Correa, 2002
66 Compulsory licenses are licenses issued by an administrative authority on predetermined terms that allow non-patent holders to produce a patented product.
67 "Members may provide limited exceptions to the exclusive rights conferred by a patent provided such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties". TRIPS Agreement, Article 30.
68 Love 2002, Correa 2002 etc.
69 Office of the UN High Commissioner for Human Rights, 2002. (CESCR-Covenant

on Economic, Social and Cultural Rights, CCPR-Covenant on Civil and Political Rights, CERD-Convention on the Elimination of Racial Discrimination, CEDAW-Convention on the Elimination of All forms of Discrimination Against Women, CAT–Convention Against Torture and other Cruel, Inhuman or Degrading Treatment of Punishment, CRC-Convention on the Rights of the Child.

70 The Central Asian Declaration on HIV/AIDS, 18 May 2001. The European Union Programme for Action: Accelerated Action on HIV/AIDS, malaria and tuberculosis in the context of poverty reduction, 14 May 2001; The Abuja Declaration and Framework for Action for the fight against HIV/AIDS, tuberculosis and other related infectious diseases in Africa, 27 April 2001; The regional call for action to fight HIV/AIDS in Asia and the Pacific, 25 April 2001; The Pan-Caribbean Partnership against HIV/AIDS, 14 February 2001; The Declaration of the Tenth Ibero-American Summit of heads of State, 18 November 2000; The United Nations Millennium Declaration, 8 September 2000; The political declaration and further actions and initiatives to implement the commitments made at the World Summit for Social Development, 1 July 2000; The political declaration and further action and initiatives to implement the Beijing Declaration and Platform for Action, 10 June 2000; The Baltic Sea Declaration on HIV/AIDS Prevention, 4 May 2000; Key actions for the further implementation of the Programme of Action of the International Conference on Population and Development, 2 July 1999; The International Covenant on Civil and Political Rights; and the United Nations Universal Declaration on Human Rights.

71 While a Handbook for Legislators was distributed in 1999, the dissemination of the Guidelines has been criticised for being inadequate and government responses have been termed disappointing. A mechanism for measuring the implementation of the Guidelines has been proposed.

72 Extract from 6th International Congress on AIDS in Asia and the Pacific, 2001, Regional Workshop on *"HIVAIDS and Human Rights: The Role of National Human Rights Institutions in the Asia and Pacific"*

73 Commission on Human Rights resolution 2000/61 and Economic and Social Council Decision 2000/220.

74 UN General Assembly Resolution 53/144 (A/RES/53/144), 8 March 1999.

75 Lawyers, activists and organisations working to defend human rights around the world

76 IDHRB, 1999

77 Extract from the 6th International Congress on AIDS in Asia and the Pacific, 2001, *"Regional Workshop on HIVAIDS and Human Rights: The Role of National Human Rights Institutions in the Asia and Pacific"*.

78 Report of the National Conference on Human Rights and HIV/AIDS, New Delhi, 24-25 November 2000.

This Conference was organised by NHRC, in Partnership with NACO, Lawyer's Collective, UNICEF and UNAIDS. The objective of the conference was to initiate the process of developing a rights-based response to the HIV/AIDS epidemic within India, to be taken forward by various State Human Rights Commission, police departments, representatives from the health-sector and State AIDS Control Societies in close collaboration with civil societies.

For further information please refer to: (http://nhrc.nic.in / report hiv=aids.htm)

79 UNAIDS/IPU, 1999

80 UNAIDS/IPU, 1999

## Chapter 5

1 South Asia high level conference on '*Accelerating the momentum in the fight against HIV/AIDS*' 3-4 February 2003, UNAIDS&UNICEF

2 Mahal, 2002

3 Misra, Mahal and Shah, 2000; Philipson and Posner, 1993; Kremer, 1998

4 This issue was also the theme for World AIDS Day 2002

5 Aggleton, 2000

6 UNAIDS, 2002a

7 UNAIDS, 2002a

8 These recommendations are drawn almost entirely from *HIV/AIDS Related Stigma and Discrimination: A Review and Suggested Ways Forward for South Asia*, UNAIDS, 2002a

9 UNAIDS, 2002a

10 Wong, 2000; Rupachandra, 2001; Ray and Sharma, 1998

11 Baden and Wach, 1998

12 Ministry of Women's Development, 1987.

13 Smith and Cohen, 2000

14 Smith and Cohen, 2000

15 CPTech, 2001

16 S.R. Kulkarni, All India Port and Dock Workers Federation, personal communication.

17 Tata Steel, 2002

18 Nangia, 1998

19 Dhillon, 2002

20 Smith and Cohen, 2000

21 A good summary of the dimensions of promoting gender equity in Gupta, 2000

# Annexures

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**Guideline 1:** States should establish an effective national framework for their response to HIV/AIDS which ensures a coordinated, participatory, transparent and accountable approach, integrating HIV/AIDS policy and programme responsibilities across all branches of Government.

**Guideline 2:** States should ensure, through political and financial support, that community consultation occurs in all phases of HIV/AIDS policy design, programme implementation and evaluation and that community organisations are enabled to carry out their activities, including in the field of ethics, law and human rights, effectively.

**Guideline 3:** States should review and reform public health laws to ensure that they adequately address public health issues raised by HIV/AIDS, that their provisions applicable to casually transmitted diseases are not inappropriately applied to HIV/AIDS and that they are consistent with international human rights obligations.

**Guideline 4:** States should review and reform criminal laws and correctional systems to ensure that they are consistent with international human rights obligations and are not misused in the context of HIV/AIDS or targeted against vulnerable groups.

**Guideline 5:** States should enact or strengthen anti-discrimination and other protective laws that protect vulnerable groups, people living with HIV/AIDS and people with disabilities from discrimination in both the public and private sectors, ensure privacy and confidentiality and ethics in research involving human subjects, emphasise education and conciliation, and provide for speedy and effective administrative and civil remedies.

**Guideline 6:** States should enact legislation to provide for the regulation of HIV-related goods, services and information, so as to ensure widespread availability of qualitative prevention measures and services, adequate HIV prevention and care information and safe and effective medication at an affordable price. States should also take measures necessary to ensure for all persons on a sustained and equal basis, the availability and accessibility of quality goods, services and information for HIV/AIDS prevention, treatment, care and support, including anti-retroviral and other safe and effective medicines, diagnostics and related technologies for preventive, curative and palliative care of HIV/AIDS and related opportunistic infections and conditions. States should take such measures at both domestic and international levels, with particular attention to vulnerable individuals and populations. [1]

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**Guideline 7:** States should implement and support legal support services that will educate people affected by HIV/AIDS about their rights, provide free legal services to enforce those rights, develop expertise on HIV-r elated legal issues and utilise means of protection in addition to the courts, such as offices of ministries of justice, ombudspersons, health complaint units and human rights commissions.

**Guideline 8:** States, in collaboration with and through the community, should promote a supportive and enabling environment for women, children and other vulnerable groups by addressing underlying prejudices and inequalities through community dialogue, specially designed social and health services and support to community groups.

**Guideline 9:** States should promote the wide and ongoing distribution of creative education, training and media programmes explicitly designed to change attitudes of discrimination and stigmatisation associated with HIV/AIDS to understanding and acceptance.

**Guideline 10:** States should ensure that government and private sectors develop codes of conduct regarding HIV/AIDS issues that translate human rights principles into codes of professional responsibility and practice, with accompanying mechanisms to implement and enforce these codes.

**Guideline 11:** States should ensure monitoring and enforcement mechanisms to guarantee the protection of HIV-related human rights, including those of people living with HIV/AIDS, their families and communities.

**Guideline 12:** States should cooperate through all relevant programmes and agencies of the United Nations system, including UNAIDS, to share knowledge and experience concerning HIV-related human rights issues and should ensure effective mechanisms to protect human rights in the context of HIV/AIDS at international level.

# Technical Note - A

## Methodology for computation of indices in the HDR

### The Human Development Index (HDI)

The HDI is a summary measure of human development. It measures the average achievements in a country in three basic dimensions of human development:

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

Before the HDI itself is calculated, an index needs to be created for each of these dimensions. To calculate these dimensions indices—the life expectancy, education and GDP indices—minimum and maximum values (goalposts) are chosen for each underlying indicator. Performance in each dimension is expressed as a value between 0 and 1 by applying the general formula:

$$\text{Dimension index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

The HDI is then calculated as a simple average of the dimension indices. The goalposts are as under:

Goalposts for calculating the HDI

| Indicator | Maximum value | Minimum value |
|---|---|---|
| Life expectancy at birth (years) | 85 | 25 |
| Adult literacy rate (%) | 100 | 0 |
| Combined gross enrolment ratio (%) | 100 | 0 |
| GDP per capita (PPP US$) | 40,000 | 100 |

### The Gender-related Development Index (GDI)

While the HDI measures average achievement, the GDI adjusts the average achievement to reflect the *inequalities* between men and women in the following dimensions:

- A long and healthy life, as measured by life expectancy at birth.
- Knowledge as measured by the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio.
- A decent standard of living, as measured by estimated earned income (PPP US$).

The calculation of the GDI involves three steps. First, female and male indices in each dimension are calculated according to this general formula:

$$\text{Dimension index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

Second, the female and male indices in each dimension are combined in a way that penalises differences in achievement between men and women. The resulting index, referred to as the equally distributed index, is calculated according to this general formula:

Equally distributed index = {[female population share (female index$^{1-}$ )] + [male population share(male index $^{1-}$ )]}$^{1/1-}$

measures the aversion to inequality. In the GDI = 2. Thus the general equation becomes

Equally distributed index ={[female population share (female index $^{-1}$ )]+[ male population share (male index $^{-1}$ )]}$^{-1}$

which gives the harmonic mean of the female and male indices.

Third, the GDI is calculated combining the three equally distributed indices in an unweighted average.

### The Gender Empowerment Measure (GEM)

Focusing on women's opportunities rather than their capabilities, the GEM captures gender inequality in three key areas:

1 Political participation and decision-making power, as measured by women's and men's percentage shares of parliamentary seats.
2 Economic participation and decision—making power, as measured by two indicators—women's and men's percentage shares of positions as legislators, senior officers and managers and women's and men's percentage shares of professional and technical positions.
3 Power over economic resources, as measured by women's and men's estimated earned income (PPP US$).

For each of these three dimensions, an equally distributed equivalent percentage

### Why = 2 in calculating the GDI

The value of is the size of the penalty for gender inequality. The larger the value, the more heavily a society is penalised for having inequalities.

If =0, gender inequality is not penalised (in this case the GDI would have the same value as the HDI). As increases towards infinity, more and more weight is given to the lesser achieving group.

The value 2 is used in calculating the GDI (as well as the GEM). This value places a moderate penalty on gender inequality in achievement.

### Goalposts for calculating the GDI

| Indicator value | Maximum value | Minimum |
|---|---|---|
| Female life expectancy at birth (years) | 87.5 | 27.5 |
| Male life expectancy at birth (years) | 82.5 | 22.5 |
| Adult literacy rate (%) | 100 | 0 |
| Combined gross enrolment ratio (%) | 100 | 0 |
| Estimated earned income (PPP US$) | 40,000 | 100 |

Note: The maximum and minimum values (goalposts) for life expectancy are five years higher for women to take into account their longer life expectancy.

(EDEP) is calculated, as a population-weighted average, according to the following general formula:

$$\text{EDEP} = \{[\text{female population share}\ (\text{female index}^{1-})] + [\text{male population share}\ (\text{male index}^{1-})]\}^{1/1-}$$

measures the aversion to inequality. In the GEM (as in the GDI) = 2, which places a moderate penalty on inequality. The formula is thus:

$$\text{EDEP} = \{[\text{female population share}\ (\text{female index}^{-1})] + [\text{male population share}\ (\text{male index}^{-1})]\}^{-1}$$

For political and economic participation and decision making, the EDEP is then indexed by dividing it by 50. The rationale for this indexation: in an ideal society, with equal empowerment of the sexes, the GEM variables would equal 50 per cent, that is, women's share would equal men's share for each variable.

Finally, the GEM is calculated as a simple average of the three indexed EDEPs.

UNDP, 2002

# Technical Note - B

## Assessing the Impact of HIV/AIDS on Human Development

Our approach to assessing the impact of the HIV/AIDS epidemic on human development involves (1) estimating its impact on the HDI or GDI in the aggregate; (2) assessing the impact on individual components of HDI and/or GDI; and (3) using the results from (a) and (b) to assess what the value of HDI would be if there were no HIV/AIDS.

One way to estimate the effect of the AIDS epidemic on the HDI (or GDI) and its component variables would be to estimate the *correlation* across countries between these variables and/or indicators of the HIV/AIDS epidemic – adult HIV prevalence and number of reported AIDS cases. However, this procedure does not adequately control for other factors that might legitimately affect life expectancy, literacy, school enrolment, and income and might possibly also be correlated with indicators of HIV/AIDS. To avoid this potential bias, we must also account for these other factors. This can be done in a variety of ways, one of which is simply controlling for pre-AIDS epidemic values of each component of HDI and GDI. In other words, we are effectively trying to determine whether HDI improved less rapidly from 1980 to 1999 in countries that had to contend with more severe HIV/AIDS epidemics, relative to others that did not. This was the approach adopted by Bloom et al. (1996) and is the one that we adopt here.

Specifically, our goal is to obtain an estimate in the context of the following model:

$$(1)\ Y_{it} = ß_0 + ß_1 Y_{i0} + ß_2 Y_{i0}^2 + \pi^* AIDS_i + \varepsilon_i \quad [i = 1, 2, \ldots N]$$

Here, N is the number of countries in the sample and $Y_{it}$ refers to the value of the dependent variable in country "i" at time "t". $Y_{i0}$ refers to the value of the dependent variable in country "i" at some pre-AIDS epidemic base year, labeled "0". AIDS refers to an indicator of the severity of the HIV/AIDS epidemic. The dependent variable could be the value of the human development index (or the gender development index), or its components. The error-term $\varepsilon_i$ (i = 1, 2, …N) is an independently and identically distributed random variable with zero mean and constant variance. There is, of course, the possibility of reverse causality if, as one expects, improvements in human development to influence the transmission of HIV, and we consider that in our analysis as well.

A few points are worth noting about the specification (1). The first is the nature of the relationship between the dependent variable and its lagged quadratic counterpart on the right hand side of equation (1). In the case of at least the human development index, the gender development index, the adult literacy rates and the like that have well defined upper and lower bounds, one would expect the following, all else being the same: countries with greater initial values of the Y variable ($Y_0$), ought to have higher values of $Y_t$. However, the closer the initial

value is to the upper bound, the smaller the degree of improvement that is possible, so that in regimes where such human development indicators are improving over time, one might expect a concave relationship between the initial value $Y_0$ and $Y_t$. Indeed, given that one might also reasonably expect life expectancy at birth to have an upper bound, so the concave relationship hypothesized previously ought to hold for life expectancy as well. Although it is less apparent that same concave relationship ought to hold for the real GDP per capita component, the well-known Solow-Swan growth model suggests that it must.[1]

In sum, one would prefer
(a) $ß_2 < 0$; and (b) $ß_1 > -2ß_2$. Second, the non-negativity of the sum of the dependent variables that are bound by unity suggests the desirable property that (c) $1 \geq$"$ß_0 + ß_1 + ß_2 \geq 0$. Ideally, one would like to undertake the estimation procedure taking account of these constraints on the parameters, but this was rendered unnecessary owing to the estimated unconstrained coefficients satisfying them anyway.

## Results

The results of estimating different versions of our specifications are highlighted in Tables T2 to T5 and can be summarised as follows. First, HIV appears to have a statistically significant association with progress in human development as indicated by the HDI (see Tables T2a – b). This result holds true both in the case of HIV prevalence rates and increase in the number of AIDS cases. This is the case whether one uses HIV prevalence rates (among those aged 15–64 years in 1998), or indicators of the effect of the AIDS epidemic, such as the average annual increase in the cumulative number of AIDS cases over the 1980-1998 period, normalised by the population aged 15–64 years in 1998. Although AIDS is more likely to be relevant in terms of influencing life expectancy at birth as measured by the United Nations population division, in practice, the use of either of the indicators—HIV prevalence or AIDS—does not seem to influence the results significantly. This is not surprising, since the correlation coefficient between the two is 0.87.[2]

Despite the much larger sample of countries, our OLS results are similar to the findings of Bloom et al. (1996) that the **HIV/AIDS epidemic has a statistically significant negative association with the HDI.** Our estimated coefficient of the AIDS variable is, however, much larger in absolute magnitude (nearly five times the estimate of Bloom et al. (1996), presumably reflecting the fact that the effect of a much larger AIDS epidemic, relative to the 1980–92 period (the focus of their study) is now beginning to be felt on human development.

The negative influence of the AIDS epidemic on human development becomes even more apparent when one allows for the possibility of reverse causality – that is, on the impact from HDI to the spread of HIV. Table T2b reports the results of estimates based on an instrumental variable (IV) approach. According to column (5) of the IV estimates reported in Table T2b, a 1 per cent increase in the average annual rate of growth of cumulative AIDS prevalence over the 1980–98 period has the potential of reducing HDI by 0.17. This is a preferred estimate. For the full sample of countries for which AIDS data were available, we find that on average, the spread of the HIV/AIDS epidemic during 1980-98 reduced HDI in 1999 by about four per cent, relative to what it

would have otherwise been – 0.715, as against 0.686.

## HIV and the Gender Development Indicators

This sub-section assesses the influence of HIV/AIDS on key gender dimensions of human development. The indicators used are the GDI and two of its key components – the ratio of female to male life expectancy at birth, and the ratio of female to male educational achievements (literacy rates, mean years of schooling in the 15+ population, and female to male ratios of primary and secondary enrolment rates).

## HIV and the GDI

The GDI is the un-weighted average of three "inequality" indices corresponding to each of its three components. Specifically, each component index, Xi (i = 1,2,3) is calculated to be the following formula

$$(2)\ X_i = [\theta X_{if} 1^{-\alpha} + (1-\theta) X_{im} 1^{-\alpha}]^{1/1-\alpha}\ (i= 1,2,3)$$

Here, $X_{if}$ is the index of female achievements in component "i", and $X_{im}$ is the index of male achievements in component "i" and θ is the female share in total population. The parameter "α" indicates the preferred degree of *inequality* aversion. In GDI calculations, it is taken to be equal to 2 (UNDP 2001).

The GDI combines the relative achievements of females and males in earned income, education and life expectancy at birth, in such a way as to penalise gender-related inequalities in 'either' direction. The GDI is the un-weighted average of three 'inequality' indices corresponding to each of its three components.[3] The main results are summarised in Tables T7–T9, which present OLS estimates.

The key dependent variable in the empirical analysis of this section is national-level HIV prevalence estimates in 1999 provided by UNAIDS. In terms of explanatory variables, we have previously discussed the potential role of different indicators of human development in influencing HIV transmission, such as income, education, health, inequality, and civil liberties. Indicators of inequality used in this paper include the ratio of female to male literacy and female to male life expectancy at birth. In estimating some of the specifications we also used an indicator for political rights and civil liberties developed by Freedom House (2002).

Analysis also emphasises the role of migrant populations as a key factor in HIV transmission. However, other factors also matter. One of them is the time elapsed since the start of the epidemic.

### Results and Discussion

Table T10 provides descriptive statistics on the variables used in the analysis of this section, and lists the countries for which the full set of such data were available. The data indicate that there is substantial variation in the variables of interest across the sample countries, with two key exceptions – the ratio of female to male life expectancy at birth and the ratio of females to males in the age group 15-49 years. Particularly noteworthy is that the estimated length of the epidemic varied from eight years in some countries to 21.5 years in others.[4] This suggests that a 'steady state' HIV prevalence will not be a useful assumption for estimation purposes, a hunch that is confirmed by the econometric results that are discussed further below. The data indicate a

substantial degree of gender inequality in educational achievement as measured by ratio of the female to male adult literacy rates in 1980. The gender inequality in literacy rates was highly correlated with the human development achievement of a country in 1980 – with a correlation coefficient of 0.91. Gender inequality in literacy was correlated to a somewhat lesser degree with economic achievement, with a correlation coefficient of 0.79.

The difference between the rate of growth of the urban population and the total population of a country during the period from 1980 to 1990 was used as a rough proxy for the rate of growth of migrant populations from rural to urban areas over the decade. The rate varied significantly between countries, with a mean annual average of growth of about 1.28 per cent for the full sample of 73 countries, a low of –0.14 per cent for Sri Lanka and a high of 7.08 per cent for Mozambique.

## Sectoral costs of HIV

Additional estimates of the effects of HIV/AIDS on health spending patterns is available from a study by Arndt and Lewis (2000) who used a 14-sector CGE model to assess the economic impact of HIV in South Africa. In their framework, and unlike previous work, the health sector was explicitly accounted for along with assumptions on household and government spending on health due to HIV/AIDS. Their paper suggests that the health sector in South Africa would not suffer as much as the other sectors on account of HIV/AIDS over the 2001-2010 period. They estimate the GDP in 2010 under projected AIDS scenarios being nearly 6.5 per cent higher than it would be if the health sector was excluded from the GDP computations.[5] In fact, compared to the no-AIDS scenario, the overall GDP under AIDS would be nearly 17 per cent lower in 2010, whereas the corresponding figure for value added in the health sector would be 10 per cent as per their simulation results.[6]

## Cost to Nations

Early work on the impact of HIV/AIDS on growth of real income (or real income per capita) inferred, rather than directly demonstrated, the aggregate economic impact of HIV/AIDS from the combination of large projected numbers of prime-age HIV-positive individuals and the relatively high costs of treating affected people.

More recent work on the aggregate economic impact of AIDS has essentially taken a more rigorous methodological route and falls into mainly two groups. The first group derives its conclusions from well-established economic models, customised in various ways to account for key aspects of the AIDS epidemic. It includes analyses that use CGE models, as well as those using a neoclassical growth model. Kambou, Devarajan and Over (1992) simulated the economic impact of the AIDS epidemic using an 11-sector CGE model of Cameroon. In their analysis, they assumed that the AIDS epidemic would claim the life of 30,000 workers (or 0.8 per cent of the labour force) each year from 1987 to 1990, with deaths occurring disproportionately among the more skilled segments of the work force. Thus, 6.0 per cent of the skilled urban work force was assumed to die of AIDS each year, compared to 0.4 per cent of the unskilled rural labour force. In their simulations, the AIDS epidemic lowered the rate of growth of real GDP by nearly two percentage points per year. Their model did not suggest any significant change in the growth of real income per capita.

Arndt and Lewis' model was intended to be more comprehensive than that of

Kambou, Devarajan and Over. It included the health sector, allowed for impacts on savings on account of medical expenditures undertaken by the government and households, labour force impacts, household and government allocations to health sector spending and exogenously given assumptions on trends in sector productivity. Moreover, in their model, the impact of the AIDS epidemic was assumed to fall disproportionately on low-skill segments of the labour force, in line with available evidence from South Africa.[7] Dynamic elements were incorporated by using outputs from the one-period CGE model as inputs into the CGE framework for subsequent years. The main conclusion was that over the 2000-2010 period, the annual rate of growth of real GDP in South Africa under their projected AIDS-scenario would be substantially lower in comparison to a no-AIDS scenario, with the difference ranging from 1 percentage point to 2.6 percentage points, depending on the year. The net effect would be a real GDP in 2010 that would be 17 per cent lower in size, compared to a no-AIDS case. They found that per capita real GDP would also suffer on account of HIV/AIDS although not as much as real GDP, being about 8 per cent lower in 2010 compared to a no-AIDS scenario.

In contrast to the studies above that rely on simulations conducted under various assumptions of HIV/AIDS, an alternative approach is to econometrically estimate the link between HIV/AIDS and national economic performance. Bloom and Mahal (1997) used standard empirical equations of the form found in Barro (1991) and Mankiw, Romer and Weil (1992) to measure the nature and strength of statistical associations between the prevalence of AIDS and the rate of growth of real GDP per capita, using cross-country data for 51 countries. The main rationale for using an empirical approach is its potential use in taking account of standard influences of AIDS, as reflected in simulation models of the type discussed above, as well as others (such as community responses to AIDS, life cycle savings behavior by individuals and the like) not readily captured by the latter. Indeed, one obvious benefit is in avoiding the pitfalls of simulation models that rely on assumptions that often lack an empirical justification. The econometric approach adopted by Bloom and Mahal took into account the possibility of simultaneity bias resulting from the effect of economic growth on HIV transmission, as well as the possible non-linear nature of the relationship between HIV prevalence and economic growth. Their main finding was that the AIDS epidemic had a statistically insignificant effect on the growth of real income per capita, with no evidence of reverse causality during the period 1980 to 1992.

There are factors that can potentially confound the results found in Bloom and Mahal's analysis. The first is the possibility that their study was undertaken at a time when HIV-prevalence rates were still too low to have a detectable economic effect at the national level.[8] To be sure, Bloom and Mahal (1997) also presented results for the impact of HIV/AIDS over the period 1987–92, when HIV might have been expected to have a greater effect on economies, relative to earlier years, but the prevalence rates at the time were obviously much lower than at present. Bonnel (2000) examined the association between rate of growth of real income per capita during the period 1990–97 and a quadratic term in HIV prevalence (after controlling for factors that could potentially confound the relationship) and found it to be negative and statistically significant. He also concluded that the HIV/AIDS epidemic depressed

the rate of growth of real income per capita in Africa during the period 1990–97 by nearly 0.7 percentage points per year, a truly remarkable decline.

McDonald and Roberts (2001) sought to address some of the above concerns, by using panel data methods to estimate the impact of HIV/AIDS, and using a modified version of the Mankiw, Romer and Weil (1992) empirical elaboration of the neoclassical growth model. Their main modeling contribution was in linking HIV/AIDS to economic growth via its impact on life expectancy, the latter serving as an indicator of health capital in an empirical equation of the link between growth of real income per capita and its determinants. They report the finding of a statistically significant effect of the HIV/AIDS epidemic on life expectancy and, via life expectancy, on growth of real income per capita. Their empirical approach of emphasising the role of HIV/AIDS in influencing per capita income via life expectancy serves to highlight the role of one major pathway through which the AIDS epidemic will have an effect on national economic performance. Recent empirical work by Bhargava et al. (2001) and Bloom, Canning and Sevilla (2001) using panel data techniques also highlights the link between life expectancy and economic growth, and could potentially be modified to serve as a means to understand the links between HIV and economic growth.

This note studies the link between HIV/AIDS and the growth of real GDP per capita. This is a useful exercise for three reasons. First, compared to the situation a decade ago, data is available for a much greater set of countries, a fact highlighted in the work of Bonnel (2000) and McDonald and Roberts (2001). At the time of Bloom and Mahal's work, data for only about 51 countries were available. Now, however, UNAIDS provides estimates of HIV prevalence in more than 200 countries. Second, the quality of data has improved compared to a decade ago. In particular, sentinel surveillance data for women visiting antenatal clinics in many countries offers a glimpse into HIV-prevalence rates in a group reasonably representative of trends in the general population.[9]

A third factor has to do with the use of AIDS case estimates, instead of HIV, in our analysis. Use of AIDS data is desirable, because many of the adverse consequences of the HIV/AIDS epidemic for aggregate economic performance have directly to do with effects on the labour force via premature death or morbidity, treatment costs and the fact that many of the individual responses to HIV are likely to kick in at the AIDS stage when they are more likely to be aware of their HIV status. Most developing countries have poor record-keeping systems, so, in all likelihood, recorded AIDS cases will be biased downwards. Thus model-based approaches to estimating AIDS cases have been used for developing countries.

## Data and Methodology for Chapter 2

The data used in the analysis were obtained from several sources. Information about the HDI, its gender-adjusted counterpart, the GDI, life expectancy at birth, literacy rates among people aged 15 years and above, enrolment rates and real per capita GDP was obtained from the *Human Development Report 2001*[10] and the World Bank's *World Development Indicators Database.*[11] In addition, we have utilised data on average years of schooling for people aged 15 years and above described in Barro and Lee (2000), the degree of openness of an economy as measured by

the ratio of exports and imports to GDP in World Bank (2001), population growth rates (World Bank 2001), proportion of that population that is Muslim and/or Judeo-Christian (Central Intelligence Agency (CIA) 2001), date of the first reported HIV and AIDS cases (United States Bureau of the Census 2001; Mann, Tarantola and Netter 1992), indicators of political freedom (Freedom House 2002) and urban population growth (World Bank 2001).

Estimates of HIV prevalence for 1999 were obtained from the UNAIDS country epidemiological fact sheets.[12] These HIV prevalence estimates were obtained by careful examination of sentinel surveillance data sources among women visiting antenatal clinics in many countries and other sources of HIV data, coupled with an extensive process of double-checking and verifying estimates of HIV so obtained. As a consequence, the full sample (as indicated in Table T10) had HIV prevalence data for 112 countries, nearly double the number of countries for which HIV estimates were available in 1996.[13]

Estimates of cumulative AIDS cases were obtained as follows. For developing countries, multi-year and multi-site HIV-prevalence information for women visiting antenatal clinics in sentinel surveillance data was used. The number of countries for which such data was available was somewhat less than the countries for which UNAIDS HIV-prevalence data were available, given that the analyses were restricted only to countries for which several years (and several sites) of sentinel surveillance HIV-prevalence data were available for women visiting antenatal clinics. This was done in two steps, with the help of a set of software packages recently developed by UNAIDS.[14] First, data points obtained from HIV sentinel surveillance were used to fit a curve for the time profile for HIV prevalence with the Epidemic Projection Package (EPP) developed by UNAIDS.[15]

Having obtained the times series of HIV prevalence rates, the second part of the method involved using the SPECTRUM software package that combined population estimates and projections with HIV prevalence rates to arrive at estimates of the incidence of AIDS cases and deaths, after taking into account the progression rate from HIV to AIDS to death.[16] The model also provides separate estimates of AIDS cases and deaths for males and females, if additional input regarding the nature of the epidemic – primarily heterosexual, homo- or bi-sexual, or injecting drug use driven – is provided. The computation assumed the median time from infection to death of about nine years in developing countries, and involves the assumption of no ARV drug use.[17] This assumption appears reasonably valid for the developing world, most of which is not in a position to afford ARVs, but not for developed countries. For the latter set of countries, we used directly the estimates of AIDS cases provided by their governments, given that the reporting errors for AIDS cases in the developed world can be expected to be small, and nowhere near as large as the developing countries, a group that includes the countries of South Asia, with poor AIDS reporting systems. For the latter group, indirect estimation via EPP and SPECTRUM, along the lines indicated above, was obviously more desirable. In sum we were able to obtain AIDS incidence and cumulative AIDS case data for a total of 76 developing and developed countries.

Table T10 summarises, for the sample countries, the main descriptive statistics relevant to our analysis of the potential impact of HIV on human development.

The full list of countries is provided in the notes to Table T10. The data indicate the substantial variation in HIV prevalence among adults, from negligible levels in some countries, to a high prevalence of nearly 34 per cent in Botswana. The mean HIV prevalence in the full cross-section of countries, in contrast to Botswana's case, is three per cent. As another example of the variation in the spread of the HIV/AIDS epidemic across countries, the average annual increase in AIDS cases (taken as a proportion of per 100 population aged 15–64 years in 1998) during the period from 1980 to 1998 was about 0.18 for the full sample, but ranged from 0 in some, to 1.93 in Botswana. Our sample of countries includes those with extremely low levels of human development in 1999—0.258 for Sierra Leone –as also countries such as Norway, with an HDI of 0.939 in 1999. Similar variation is apparent from data on education variables such as adult literacy, mean years of schooling and schooling enrolment, life expectancy at birth and real GDP per capita.

## a) The econometric model for HD Impact on HIV transmission

The starting point of our discussion is the following simple equation that can be used to describe the dynamics of HIV transmission in an adult population, whose HIV prevalence rate is denoted by H.[18]

$$(3)\quad dH/dt = (1-H)*H_p*ß*T - \theta*H$$

Here dH/dt is the derivative of H with respect to time "t" and equation (3) describes the movement of HIV prevalence over time. $H_p$ is the infection rate among the "sexual" partners of the above population, ß is the proportion of unprotected sexual interactions in any given interval and T is the rate of transmission of HIV during unprotected sex. θ denotes the proportion exiting from the infected pool in any time period.

The HIV prevalence rate among partners, the proportion of people in the population of interest who have unprotected sex and the rate of transmission of HIV will depend on a number of variables, such as the level of knowledge people possess about risk of infection, income levels and hence the opportunity cost of infection, concerns about health (including one's own infection status, especially if there is assortative matching), opportunity, inequalities that allow some people to pay off others to incur increased risk as well as indicative of poverty, cultural norms that govern the practice of unprotected sex and the like. Specifically, let us assume that the impact of these other forces is felt in such a way that

$$(4)\quad H_p*ß*T = (\alpha + \pi*x)*\rho*H$$

Here x indicates all variables other than an average individual's HIV-status, H. H is taken to enter multiplicatively in this formulation. Thus, we can write

$$(5)\quad dH/dt = (1 - H) * (\alpha + \pi*x) *\rho*H - \theta*H$$

and

$$(6)\quad dH/dt = (\alpha*\rho + \rho*\pi*x - \theta)*H - (\alpha + \pi*x)*\rho*H^2$$

This formulation, under different assumptions, leads to three related econometric specifications, as is demonstrated below. The differential equation in (6) has a readily obtainable solution given by,

$$(7)\quad Z(t) = \exp(-k*t) * z(0) + (m/k)*(1 - \exp(-k*t))$$

Where

$k = (\alpha*\rho + \rho*\pi*x - \theta)$
$m = (\alpha + \pi*x)*\rho$
$z(t) = 1/H(t)$

As $k \to \infty$, Z(t) tends to the steady state "m/k". We can also see that

(8) $Z(t) - (m/k) = [Z(0) - (m/k)]* \exp(-k*t)$

Case I: In the special case where $\theta = 0$ (implying that m/k = 1), we have from (8), after taking logs on both sides and substituting for z = (1/H)

(9) $\ln(H/(1-H)) = \ln(H(0)/(1-H(0))) + k*t$

or,

(9') $\ln(H/(1-H)) = \ln(H(0)/(1-H(0))) + \alpha*\rho*t + \rho*\pi*\tau*x$

Assuming all countries start from roughly a similar sized epidemic (roughly 1 per cent of some segment of the population), we can set forth the first version of our econometric formulation as

(10) $\ln(H/(1-H)) = \delta + \beta*t + \lambda*t*x + \varepsilon$

Here, $\delta$, $\beta$ and $\lambda$ are parameters (or vectors of parameters) to be estimated and $\varepsilon$ is an "error" term with the usual properties.

Notice that the assumption of $\theta = 0$ is a stringent one, because it is effectively ruling out a faster rate of exits, relative to the rest of the population, from the infected population in the model. Moreover, the assumption implies that the population heads to a steady state HIV-prevalence level of unity, but with the proviso that the *rate* at which it get there depends on the parameters and the x variables characteristic of each group.

Case II: An alternative formulation is one is where $\theta \neq 0$. If so, we can write from above

(8') $Z(t) = \exp(-k*t) * z(0) + (m/k)*(1 - \exp(-k*t))$

If we work with the assumption that we are still early in the epidemic, using a linear approximation around t=0 we can write

(11) $Z(t) \approx Z(0)(1 - k*t) + m*t$

From this we have,

(12) $Z(t) \approx Z(0) + (m - Z(0)*k)*t$

The resulting econometric specification is:

(12') $1/H(t) = Z(0) + \varphi + \chi*t + \mu*t*x + \nu$

Where $\nu$ is an error term and $(Z(0)+ \varphi)$ is constant. Given that (12') is the outcome of a linear approximation, the estimation exercise also considered another specification that allowed for the natural log transform of (1/H) as the dependent variable of interest.

Case III: At the other extreme, one can focus on the steady state outcomes for purposes of estimation if one believes that the country HIV/AIDS epidemics are far enough advanced. In particular, going back to

(4) $dH/dt = (\alpha*\rho + \rho*\pi*x - \theta)*H - (\alpha + \pi*x)*\rho*H^2$

Putting dH/dt = 0, we have that in the steady state

(13) $H = (\alpha*\rho + \rho*\pi*x - \theta)/[(\alpha + \pi*x)*\rho]$

and

(13') $(1 - H) = \theta/[(\alpha + \pi*x)*\rho]$

This gives rise to the following econometric specification

(14) $H*(1 - H)^{-1} = \delta + \lambda*x + \varepsilon$

The statistical analysis of this paper on the determinants of HIV prevalence involves primarily the estimation of (9'), (12') and its logarithmic counterpart, and (14). However, as discussed below the paper also presents the results of specifications of the form in (15) below to compare the results using national level HIV prevalence data with those obtained by Over (1998) who used this specification to analyse urban HIV prevalence rates in developing countries.

(15) $\ln (H*(1 - H)^{-1}) = \delta + \lambda*x + \eta*t + \varepsilon$

## b) Methodology of estimating the impact of HIV

The standard approach has been to use data on HIV prevalence (taken to be representative of the whole population), combine it with a description of the rate at which HIV cases progress to AIDS and to death (normally approximated by a Weibull distribution, Bloom and Mahal, 1997), along with a further assumption about the start date of the epidemic. Unfortunately, an infinite number of time profiles of HIV prevalence that can achieve the HIV prevalence at a point in time exist, even with these requirements. Thus the typical approach to derive the time profile of HIV/AIDS cases has been to make an assumption that HIV incidence follows a gamma function of one (or, two) parameter variety, add to that a further statement about the peak year of incidence, and then to choose the value of the gamma distribution parameter itself.[19] Bloom and Mahal (1997) introduced the methodological innovation in a maximum likelihood framework whereby the gamma distribution parameter was chosen simultaneously as part of the econometric specification linking AIDS to economic growth. However, owing to data from sentinel surveillance sites being available for several recent years and developing countries, it is possible to directly derive the time profile of HIV incidence using curve-fitting techniques and software provided by UNAIDS for these countries. The methodology is more fully discussed in UNAIDS (2002b).

For the purpose of examining the impact of AIDS on economic growth, we re-estimated two empirical equations — (1) modified version of the empirical specification used in Bloom and Mahal (1997) with new data, for the period 1980 to 1998, for 69 countries; and (2) a modified version of the equation used by Bloom and Williamson (1998). The set of countries chosen was smaller than the countries for which UNAIDS provides HIV prevalence data, in order to include only those developing countries for which a large number of sentinel surveillance data were available for some years, for reasonably sized samples. The sample of countries also included developed nations from Europe and North America, as well as Australia, Japan and New Zealand, where reported AIDS cases can be expected to be a reasonably accurate indicator of the true AIDS cases. These were combined with data on range of geographic demographic and socio-economic variables as additional explanatory factors — real GDP per capita in 1980, government expenditures on education and defence as a proportion of GDP, mean years of schooling, the ratio of exports and

imports to GDP, rate of growth of population, the rate of growth of working age population (15–64 years), whether the country was landlocked, quality of institutions, whether located in tropical regions, life expectancy at birth in 1980 and the rate of growth of lagged per capita income. The sources of this data included the World Development Indicators database,[20] the Penn World Tables,[21] Barro-Lee database on education indicators, Human Development Reports for various years, and Gallup and Sachs (2000).

Our empirical approach was to estimate the following equation, the same as equation (1) in Bloom and Mahal (1997, p.112), and equation (5) in Bloom and Williamson (1998, p.431) after including a term for AIDS.

$$(16)\quad Y_i = \alpha + \beta AIDS_i + X_i\pi + \varepsilon_i$$

(i=1,2, ..., N).

Here $Y_i$ is the rate of growth of real income per capita, $AIDS_i$ is the average annual increase in the cumulative adult prevalence of AIDS (the average annual increase in the number of AIDS cases over the estimation period, taken as a proportion of the population aged 15–64 years in 1998), $X_i$ is a vector of variables that influence economic growth and $\varepsilon_i$ are independently and identically distributed error terms, each with zero mean; $\alpha$, $\beta$ and $\pi$ are parameters to be estimated. A major goal of our analysis is to obtain a consistent estimate of the coefficient of the AIDS variable, $\beta$.

The results of estimation of equation (1) by ordinary least squares, given the finding both in Bloom and Mahal (1997) and Bonnel (2000) of there being no statistical evidence of a reverse causality going from growth of real income per capita to HIV/AIDS. Estimation of equation (1) by instrumental variable methods (results not reported here) confirmed these earlier findings. The estimation method does not rely on panel data methods and thus is open to the methodological objections noted previously. This is proposed to be rectified in future work, as more HIV prevalence data becomes available. The results as reported here are also open to the objection that they may be contaminated by the effects of classical measurement error in the AIDS variable, which can influence the coefficient to becoming statistically insignificant. This is more readily addressed by the use of IV methods. However, as noted previously, the use of IV methods does not influence the main results of this paper. Another aspect of the estimation method (for both Bloom and Williamson and Bloom and Mahal specifications) is that the population growth rate variable has been adjusted to compensate for any AIDS deaths that may have occurred. Doing so raises the "adjusted" rate of population growth over that actually observed. This adjustment permits the coefficient of the AIDS variable to be interpreted as the sum of the direct effect of AIDS on growth of real income per capita, plus any indirect effect on growth of real income per capita, working via the impact of AIDS on population growth.

Table T1

**Human development trends in South Asia, by country**

| Country | Annual rate of growth HDI (%) 1990-99 | Annual rate of growth GDP per capita (%) 1990–99 | Annual rate of growth Life expectancy 1980–99 | Annual rate of growth Adult literacy rate(%) 1980–99 | Annual rate of growth Freedom House Index (%) 1980–2000 |
|---|---|---|---|---|---|
| Afghanistan | N.A. | N.A. | 0.71 | N.A. | 0.00 |
| Bangladesh | 1.42 | 2.99 | 1.19 | 1.76 | 0.77 |
| Bhutan | N.A. | 3.16 | N.A. | N.A. | 1.32 |
| India | 1.26 | 3.73 | 0.79 | 1.70 | 0.00 |
| Iran | 1.14 | 2.31 | 0.89 | 2.16 | 0.92 |
| Maldives | N.A. | N.A. | 1.00 | 0.34 | 0.48 |
| Nepal | 1.63 | 2.27 | 1.02 | 3.04 | -2.23 |
| Pakistan | 1.36 | 1.41 | 0.67 | 2.51 | -0.43 |
| Sri Lanka | 0.62 | 3.84 | 0.39 | 0.37 | 1.70 |

*Note*: N.A. indicates not available

*Source*: Author's calculations using World Bank, 2000 data.

Table T2(a)

**HIV/AIDS and the Human Development Index, 1980-99, Ordinary Least Squares**

| Regressors | Human Development Index 1999 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | 0.04(0.04) | 0.02(0.05) | 0.06(0.03) | -0.004(0.036) | 0.02(0.04) |
| HDI80 | 1.17(0.15) | 1.20(0.20) | 1.22(0.11) | 1.41(0.13) | 1.35(0.14) |
| HDI80*HDI80 | -0.17(0.12) | -0.17(0.16) | -0.25(0.09) | -0.39(0.11) | -0.34(0.11) |
| HIV prevalence 1998 (per 100 population aged 15–64 in 1998) | | | -0.0043 (0.0016) | -0.0045 (0.0016) | |
| Average annual increase in cumulative AIDS cases 1980-98 (per 100 population aged 15–64 in 1998) | | | | | -0.10 (0.02) |
| Number of observations | 93 | 67 | 93 | 67 | 67 |
| R-squared | 0.957 | 0.966 | 0.974 | 0.983 | 0.984 |

*Source*: Author's calculations. Heteroskedasticity-corrected standard errors reported in parentheses.

Table T2(b)

## HIV/AIDS and the Human Development Index, 1980–99, IV estimates

| Regressors | Human Development Index 1999 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | 0.04(0.04) | 0.02(0.05) | 0.06(0.03) | -0.01(0.04) | 0.02(0.05) |
| HDI80 | 1.17(0.15) | 1.20(0.20) | 1.25(0.11) | 1.51(0.13) | 1.46(0.17) |
| HDI80*HDI80 | -0.17(0.12) | -0.17(0.16) | -0.29(0.09) | -0.50(0.11) | -0.46(0.13) |
| HIV prevalence 1998 (per 100 population aged 15–64 in 1998) | | | -0.0061 (0.0012) | -0.0065 (0.0011) | |
| Average annual increase in cumulative AIDS cases 1980-98 (per 100 population aged 15–64 in 1998) | | | | | -0.17 (0.03) |
| Number of observations | 93 | 67 | 93 | 67 | 67 |
| HausmanTest-statistic Chi-sq(3) | | | 16.16 | 20.81 | 33.76 |
| R-squared | 0.957 | 0.966 | 0.970 | 0.979 | 0.975 |

*Note*: Robust standard errors reported in parentheses. Specifications (3)-(5) are estimated using instrumental variables for the HIV/AIDS variables.

*Instruments*: HDI80, HDI80-squared, Year of the start of the AIDS epidemic, proportion of population that is Muslim, the degree of openness of an economy (ratio of the sum of imports and exports to GDP in 1980), the mean years of schooling in population aged 15 years and above (1980), the ratio of life-expectancy of females to that of males, and the rate of growth of population during 1970-80.

Table T3(a)

## HIV/AIDS and life expectancy at birth, 1980–98, OLS estimates

| Regressors | Life Expectancy at Birth, 1998 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | -30.48 (12.06) | -12.94 (15.90) | -26.17 (8.00) | -23.85 (9.32) | -21.85 (9.79) |
| Life expectancy, 1980 (years) | 2.24 (0.42) | 1.54 (0.56) | 2.30 (0.26) | 2.15 (0.32) | 2.07 (0.32) |
| Life expectancy, 1980 Squared | -0.011 (0.004) | -0.004 (0.005) | -0.012 (0.002) | -0.010 (0.003) | -0.010 (0.003) |
| HIV prevalence 1998 (per 100 population aged 15–64 in 1998) | | | -0.58 (0.08) | -0.54 (0.09) | |
| Average annual increase in cumulative AIDS cases 1980-98 per 100 population aged 15-64 in 1998) | | | | | -11.40 (3.25) |
| Number of observations | 112 | 76 | 112 | 76 | 76 |
| R-squared | 0.874 | 0.891 | 0.936 | 0.943 | 0.947 |

*Source*: Author's calculations. Heteroskedasticity-corrected standard errors reported in parentheses.

Table T3(b)

**HIV/AIDS and life expectancy at birth, 1980–98, IV estimates**

| Regressors | Life Expectancy at Birth, 1998 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | -30.48<br>(12.06) | -12.94<br>(15.90) | -31.21<br>(8.62) | -32.44<br>(9.53) | -29.65<br>(12.35) |
| Life expectancy, 1980 (years) | 2.24<br>(0.42) | 1.54<br>(0.56) | 2.53<br>(0.28) | 2.54<br>(0.31) | 2.49<br>(0.41) |
| Life expectancy, 1980 Squared | -0.011<br>(0.004) | -0.004<br>(0.005) | -0.014<br>(0.002) | -0.014<br>(0.003) | -0.014<br>(0.003) |
| HIV prevalence 1998 (per 100 population aged 15–64 in 1998) | | | -0.78<br>(0.15) | -0.75<br>(0.14) | |
| Average annual increase in cumulative AIDS cases 1980-98 (per 100 population aged 15-64 in 1998) | | | | | 18.61<br>-(2.98) |
| Number of observations | 112 | 76 | 105 | 73 | 73 |
| Hausman Test-Statistic | | | 5.11 | 0.80 | 57.29 |
| R-squared | 0.874 | 0.891 | 0.928 | 0.935 | 0.923 |

*Source*: Author's calculations. Heteroskedasticity-corrected standard errors reported in parentheses. Specifications (3)-(5) are estimated using instrumental variables for the HIV/AIDS variables.
*Instruments*: HDI80, HDI80-squared, Year of the start of the AIDS epidemic, proportion of population that is Muslim, the degree of openness of an economy (ratio of the sum of imports and exports to GDP in 1980), the mean years of schooling in population aged 15 years and above (1980), the ratio of life-expectancy of females to that of males, and the rate of growth of population during 1970-80.

Table T4

**HIV/AIDS and the adult literacy rate, 1980–98, OLS estimates**

| Regressors | Adult Literacy Rate, 1998 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | 10.35<br>(3.07) | 10.40<br>(3.62) | 10.65<br>(3.10) | 11.14<br>(3.63) | 10.97<br>(3.64) |
| Adult literacy rate, 1980 | 1.44<br>(0.11) | 1.42<br>(0.13) | 1.39<br>(0.11) | 1.34<br>(0.13) | 1.36<br>(0.13) |
| Adult literacy rate squared, 1980 | -0.006<br>(0.001) | -0.005)<br>(0.001 | -0.005<br>(0.001) | -0.005<br>(0.001) | -0.005<br>(0.001) |
| HIV prevalence 1998 (per 100 population aged 15–64 in 1998) | | | 0.09<br>(0.06) | 0.12<br>(0.06) | |
| Average annual increase in cumulative AIDS cases 1980–98 (per 100 population aged 15–64 in 1998) | | | | | 2.23<br>(1.05) |
| Number of observations | 112 | 75 | 112 | 75 | 75 |
| R-squared | 0.965 | 0.965 | 0.966 | 0.966 | 0.965 |

*Source*: Author's calculations. Heteroskedasticity-corrected standard errors reported in parentheses. IV Specification found to be statistically indistinguishable from OLS specification using a Hausman test.

Table T5

**HIV/AIDS and per capita real GDP, 1980–98, OLS estimates**

| Regressors | Real GDP per capita, 1998 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | -444.37<br>(150.97) | -274.09<br>(133.16) | -429.06<br>(183.85) | -105.00<br>(209.52) | -135.42<br>(180.53) |
| Real GDP per capita 1980 (1995 US$) | 1.64<br>(0.13) | 1.71<br>(0.11) | 1.64<br>(0.13) | 1.70<br>(0.11) | 1.70<br>(0.11) |
| Real GDP per capita 1980 squared (1995 US$) | -0.00001<br>(0.00000) | -0.00001<br>(0.00000) | -0.00001<br>(0.00000) | -0.00001<br>(0.00000) | -0.00001<br>(0.00000) |
| HIV Prevalence 1998 (per 100 population aged 15–64 in 1998) | | | -3.20<br>(21.66) | -26.52<br>(27.96) | |
| Average annual increase in cumulative AIDS cases 1980–98 (per 100 population aged 15–64 in 1998) | | | | | -470.02<br>(370.98) |
| Number of observations | 102 | 74 | 102 | 74 | 74 |
| R-squared | 0.950 | 0.960 | 0.950 | 0.960 | 0.960 |

*Source*: Author's calculations. Heteroskedasticity-corrected standard errors reported in parentheses

Table T6

**Descriptive statistics (HIV/AIDS and inequality indices)**

| Variable | N | Mean | Standard Deviation | Minimum | Maximum |
|---|---|---|---|---|---|
| HIV prevalence, 1999 (per 100 adults 15–64) | 112 | 2.977 | 5.755 | 0.003 | 33.831 |
| Annual average increase in cumulative AIDS (per 100 adults, 15–64 years) | 76 | 0.180 | 0.319 | 0 | 1.934 |
| Gender Development Index, 1999 | 108 | 0.681 | 0.194 | 0.260 | 0.937 |
| Inequality Index Literacy rate in population 15+, 1998 | 110 | 0.778 | 0.232 | 0.110 | 1.000 |
| Inequality Index Life expectancy at birth, 1998 | 115 | 0.678 | 0.198 | 0.204 | 0.926 |

*Note*: N refers to the number of countries in the sample.
*Source*: World Bank, 2000; UNDP, 2000

Countries: *West Asia and Africa*: Algeria, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Cote d'Ivoire, Cyprus, Djibouti, Egypt, Ethiopia, Gabon, The Gambia, Ghana, Israel Jordan, Kenya, Libya, Madagascar, Malawi, Mali, Morocco, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Saudi Arabia, Senegal, Sierra Leone, South Africa, Swaziland, Syria, Tanzania, Tunisia, Uganda, Zaire, Zambia, Zimbabwe. *Asia*: Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Iran, Japan, Republic of Korea, Malaysia, Maldives, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam. *Latin America and Caribbean*: Argentina, The Bahamas, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, Venezuela. *North America*: Canada, Mexico, United States. *Oceania*: Australia, New Zealand

*Europe*: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Malta, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom

Table T7

**HIV/AIDS and the Gender Development Index, 1980–2000, OLS**

| Regressors | Gender Development Index 2000 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | 0.08<br>(0.02) | 0.05<br>(0.02) | 0.12<br>(0.02) | 0.10<br>(0.02) | 0.11<br>(0.02) |
| Inequality Index<br>Life expectancy at birth 1980 | 0.79<br>(0.06) | 0.81<br>(0.07) | 0.71<br>(0.06) | 0.69<br>(0.07) | 0.67<br>(0.07) |
| Inequality Index<br>Adult literacy rate 1980 | 0.17<br>(0.04) | 0.19<br>(0.04) | 0.20<br>(0.04) | 0.25<br>(0.04) | 0.25<br>(0.04) |
| HIV prevalence 1998<br>(per 100 population aged 15–64 in 1998) | | | -0.0028<br>(0.0009) | -0.0025<br>(0.0008) | |
| Average annual increase in cumulative AIDS cases 1980-98<br>(per 100 population aged 15–64 in 1998) | | | | | -0.06<br>(0.02) |
| Number of observations | 107 | 74 | 107 | 74 | 74 |
| R-squared | 0.947 | 0.974 | 0.953 | 0.977 | 0.979 |

*Source*: Author's calculations. Heteroskedasticity-corrected standard errors reported in parentheses.

Table T8

**HIV/AIDS and inequality index for life expectancy at birth, 1980–98, OLS estimates**

| Regressors | Inequality Index for Life Expectancy at Birth, 1998 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | -0.08<br>(0.08) | -0.005<br>(0.093) | -0.02<br>(0.05) | -0.02<br>(0.06) | -0.002<br>(0.069) |
| Inequality Index<br>Life expectancy, 1980 | 1.52<br>(0.28) | 1.14<br>(0.35) | 1.57<br>(0.17) | 1.52<br>(0.20) | 1.43<br>(0.22) |
| Inequality Index<br>Life expectancy, 1980 Squared | -0.44<br>(0.23) | -0.07<br>(0.29) | -0.60<br>(0.13) | -0.52<br>(0.15) | -0.44<br>(0.17) |
| HIV prevalence 1998<br>(per 100 population aged 15–64 in 1998) | | | -0.0097<br>(0.0013) | -0.0092<br>(0.0014) | |
| Average annual increase in cumulative AIDS cases 1980–98<br>(per 100 population aged 15–64 in 1998) | | | | | -0.19<br>(0.06) |
| Number of observations | 112 | 76 | 112 | 76 | 76 |
| R-squared | 0.886 | 0.900 | 0.948 | 0.955 | 0.954 |

*Source*: Author's calculations. Heteroskedasticity-corrected standard errors reported in parentheses.

Table T9

**HIV/AIDS and the inequality index for adult literacy rate, 1980–98, OLS estimates**

| Regressors | Inequality Index of Adult Literacy Rate, 1998 | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Constant | 0.15<br>(0.02) | 0.14<br>(0.02) | 0.14<br>(0.02) | 0.14<br>(0.02) | 0.14<br>(0.02) |
| Inequality Index<br>Adult literacy rate, 1980 | 1.40<br>(0.08) | 1.43<br>(0.09) | 1.39<br>(0.08) | 1.42<br>(0.10) | 1.42<br>(0.10) |
| Inequality Index<br>Adult literacy rate squared, 1980 | -0.56<br>(0.06) | -0.58<br>(0.07) | -0.55<br>(0.07) | -0.56<br>(0.08) | -0.56<br>(0.08) |
| HIV prevalence 1998<br>(per 100 population aged 15–64 in 1998) | | | 0.0005<br>(0.0006) | 0.0005<br>(0.0007) | |
| Average annual increase in cumulative AIDS cases 1980-98<br>(per 100 population aged 15–64 in 1998) | | | | | 0.01<br>(0.01) |
| Number of observations | 109 | 74 | 109 | 74 | 74 |
| R-squared | 0.975 | 0.980 | 0.975 | 0.980 | 0.980 |

*Source*: Author's calculations. Heteroskedasticity-corrected standard errors reported in parentheses.
IV Specification found to be statistically indistinguishable from OLS specification using a Hausman test.

Table T10

**Descriptive statistics**

| Variable | N | Mean | Standard Deviation | Minimum | Maximum |
|---|---|---|---|---|---|
| HIV prevalence, 1999 (per 100 adults 15–64) | 112 | 2.977 | 5.755 | 0.003 | 33.831 |
| Annual average increase in cumulative AIDS (per 100 adults, 15–64) | 76 | 0.180 | 0.319 | 0 | 1.934 |
| Human Development Index, 1999 | 112 | 0.684 | 0.195 | 0.258 | 0.939 |
| Real income per capita, 1998 (1995 US$) | 110 | 7,534 | 11,155 | 110 | 44,906 |
| Literacy rate in population 15+, 1998 (per cent) | 112 | 78.34 | 22.11 | 15.3 | 100 |
| Mean years of schooling 15+, 1995 (years) | 93 | 6.05 | 2.89 | 0.69 | 12.18 |
| Gross secondary enrolment, 1995 (per cent) | 91 | 67.27 | 36.29 | 5.4 | 146 |
| Gross primary enrolment, 1995 (per cent) | 100 | 97.66 | 22.39 | 29.00 | 162.00 |
| Life expectancy at birth, 1998 (years) | 115 | 65.65 | 11.88 | 37.40 | 80.54 |

*Note*: N refers to the number of countries in the sample.

*Source*: World Bank, 2000; UNDP, 2000

Countries: *West Asia and Africa*: Algeria, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Cote d'Ivoire, Cyprus, Djibouti, Egypt, Ethiopia, Gabon, The Gambia, Ghana, Israel Jordan, Kenya, Libya, Madagascar, Malawi, Mali, Morocco, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Saudi Arabia, Senegal, Sierra Leone, South Africa, Swaziland, Syria, Tanzania, Tunisia, Uganda, Zaire, Zambia, Zimbabwe. *Asia*: Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Iran, Japan, Republic of Korea, Malaysia, Maldives, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam. *Latin America and Caribbean*: Argentina, The Bahamas, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica,

Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, Venezuela. *North America*: Canada, Mexico, United States. *Oceania*: Australia, New Zealand

*Europe*: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Malta, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom

## Endnotes

1 The key idea here is that economies that are initially richer (that is, with a greater initial real GDP per capita) grow at a slower pace than those with lower levels of GDP per capita – the so-called "convergence hypothesis " (for example, Barro 1991). Define the t-year growth rate of real GDP per capita as [Y(t) – Y(0)]/Y(0). This growth is negatively correlated with Y(0), according to the convergence hypothesis, i.e., one could say, for example [Y(t) – Y(0)]/Y(0) = (*Y(0), with (< 0. But this implies precisely the concave relationship we refer to in the main text.

2 Thus, it is not unreasonable to imagine that both the HIV and AIDS variables used in this paper are indicative of the morbidity and mortality associated with the HIV/AIDS epidemic.

3 Specifically, each component index, $X_i$ (i = 1,2,3) is calculated to be the following formula

$X_i = [\,, X_{if}^{1-\pm} + (1-\,,) X_{im}^{1-\pm}]^{1/1-\pm}$ (i = 1,2,3)

Here, $X_{if}$ is the index of female achievements in component "i", and $X_{im}$ is the index of male achievements in component "i" and , is the female share in total population. The parameter "±" indicates the preferred degree of *inequality* aversion. In GDI calculations, it is taken to be equal to 2 (UNDP 2001). Information on GDI in 2000 was obtained from the Human Development Report (2001), and information on education variables and life expectancy variables, separately by gender, from the World Development Indicators database of the World Bank (World Bank 2000). The latter set of information was used to construct the component inequality indices for life expectancy at birth in 1980 and 1998, and adult literacy rates for 1980 and 1998. Specifications similar to (1) were estimated to assess the impact of HIV/AIDS on inequality indices, with one exception. Because GDI information for 1980 was unavailable, 1980 values of the component index for the adult literacy rate and the component index for life expectancy at birth were used as explanatory variables to control for influences other than HIV/AIDS that could possibly influence GDI.

4 The start date of the epidemic was assumed to be the year the first AIDS case was reported in each country, or a population sample found with HIV prevalence exceeding 0.5 per cent, further adjusted by the commonly accepted starting year of the epidemic for each region.

5 Arndt and Lewis, 2000, p.12; Arndt and Lewis, 2001

6 Arndt and Lewis 2001, p.16

7 Arndt and Lewis, 2000, p.9

8 Bonnel 2000, p.3, McDonald and Roberts, 2001, p.6

9 Some qualifications to this claim are necessary. It is not obviously true that HIV prevalence rates among women visiting antenatal clinics are representative of prevalence rates among men. Are these rates reasonably representative of HIV-prevalence rates among women in the reproductive age group? Many people do not visit antenatal clinics, most of which are located

in urban areas, so they are likely to have lower proportions of rural women. Second, young women at high risk from HIV infection do not visit antenatal clinics on account of stigma. Third, HIV seems to lead to lower fertility rates, so that visitors to antenatal clinics would disproportionately represent individuals with lower HIV prevalence, relative to the whole group. Finally, most of the sentinel surveillance sites are located in public facilities, so that there would be socio-economic differences between women whose blood is tested for HIV in the sentinel surveillance sites, and those who visit private facilities, and are not covered. These caveats suggest that sentinel surveillance data would underestimate HIV prevalence among women in reproductive age groups. The relatively greater ease with which HIV is transmitted to women, compared to men, and the increasing role of heterosexual sex in HIV transmission in developing countries, suggests however, at least one factor leading to a bias in the other direction when using ante-natal clinic HIV data to assess HIV prevalence rates among all adults.

10 UNDP, 2001

11 World Bank, 2001

12 UNAIDS/WHO, 2001, UNAIDS, 2000b and d

13 Bloom et al., 1996

14 UNAIDS, 2002b

15 The main advantages of the EPP over its predecessor, EPIMODEL, is its ability to make much more effective use of larger set of data points on HIV-prevalence, and to be able to work with a much broader set of variables influencing HIV-prevalence (Chin and Lwanga 1990, UNAIDS 2002b). In particular, EPP involves the estimation of four parameters that describe the time profile of HIV prevalence in a population – the initial year of the epidemic, the initial proportion of the population at risk for HIV infection, the distribution of the population into not at-risk and at-risk categories, and the rate at which the at-risk population gets infected with HIV. For a given pattern of progression from HIV to AIDS, given death rate among individuals not infected with HIV, birth rates of HIV-negative children, survival rates to age-15 among HIV-infected children, fertility reduction due to HIV and the rate of perinatal transmission, the EPP finds the (four) parameter estimates and the resultant temporal pattern of HIV prevalence that "best fits" the observed HIV-prevalence data from sentinel sites. Essentially, this amounts to choosing the parameters so as to minimise the error sum of squares of the fitted curve (UNAIDS 2002b, p.41). A particularly attractive element of EPP is its distinguishing rural and urban HIV surveillance data to arrive at separate (and combined) HIV prevalence estimates for rural and urban regions.

16 For additional details, see UNAIDS 2002b

17 The model also used assumptions about declines in fertility rates owing to HIV infection among reproductive age women.

18 See, for instance, Anderson and May 1991; Kremer 1996

19 Chin and Lwanga, 1991

20 World Bank, 2000

21 Summers and Heston, 1991

## NEPAL

| Indicator | Year | Estimate | Source |
|---|---|---|---|
| Population (millions) | 2000 | 23.0 | Global HDR 2002 |
| Population growth (1999–2001) | N.A. | N.A. | — |
| Annual population growth (%) | 1975–2000 | 2.2 | Global HDR 2002 |
| Population density (per sq. km) | 1991(census) | 126 | SYAP, UN ESCAP, 2001 |
| Sex Ratio (females per 1,000 males) | N.A. | N.A. | — |
| Crude Birth Rate (per 1000) | 2000 | 33.6 | SYAP, UN ESCAP, 2001 |
| Crude Death Rate (per 1000) | 2000 | 10.0 | SYAP, UN ESCAP, 2001 |
| Total Fertility Rate (per woman) | 1995–2000 | 4.8 | Global HDR 2002 |
| Infant Mortality Rate (per 1000 live births) | 2000 | 72 | Global HDR 2002 |
| Maternal Mortality Ratio (per 100,000 live births) | 1985–99 | 540 | Global HDR 2002 |
| Human Development Index rank | 2000 | 142 | Global HDR 2002 |
| Adult literacy rates (% age 15 and above) | 2000 | 41.8 | Global HDR 2002 |
| Population below income poverty line(%) ($ 1 a day) (1993) (PPP US$) | 1983–2000 | 37.7 | Global HDR 2002 |
| Urban population (%) | 2000 | 11.8 | Global HDR 2002 |
| Life expectancy at birth (years) | 2000 | 58.6 | Global HDR 2002 |
| GDP per capita (PPP US$) | 2000 | 1327 | Global HDR 2002 |
| Population using adequate sanitation facilities (%) | 2000 | 27 | Global HDR 2002 |
| Population using improved water sources (%) | 2000 | 81 | Global HDR 2002 |
| Public expenditure on health (as % of GDP) | 1998 | 1.3 | Global HDR 2002 |
| Private health expenditure (% of GDP) | 1998 | 4.2 | Global HDR 2002 |
| Physicians per 100,000 population | 1990–99 | 4 | Global HDR 2002 |
| Population with access to essential drugs (%) | 1999 | 0–49 | Global HDR 2002 |
| HIV prevalence among adults (%) | 2001 | 0.5 | UNAIDS 2002c |

Note: N.A. indicates not available

### Country Profile

- Among the poorest and least developed countries in the world.
- Nearly half of its population lives below the poverty line.
- One of the two countries in the world where life expectancy of men is longer than that of women.
- Ethnically and geographically diverse.
- Seasonal and long-term mobility and migration abroad is common.
- Consumption of drugs is widespread.
- No identifiable red light areas. The sex trade is covert and takes place on the streets and in the parks of Kathmandu and major towns.
- Trafficking of girls to India a major problem.
- Number of Nepalese sex workers in India estimated to range from 20,000 to 100,000 or more.

### HIV/AIDS Scenario

- HIV epidemic characterised by high prevalence among groups involved in high-risk behaviour.
- Prevalence among street sex workers in Kathmandu rose from 1 per cent in 1992 to 16 per cent in 1998.
- Prevalence among injecting drug users rose from an estimated 2 per cent in 1991 to 50 per cent in 1997. There are an estimated 20,000 IDUs in Nepal.
- Prevalence among STD patients has been fluctuating, ranging from 1 per cent to 5 per cent in Kathmandu in 1998.
- In essence, the prevalence ranged from no evidence to 3 per cent.
- Sentinel surveys in pregnant women in 1991 and 1992 in eight districts showed no evidence. (US Census Bureau, HIV/AIDS Surveillance Data Base, June 2000)
- The HIV situation is rapidly deteriorating from low prevalence to concentrated epidemic.

**Source**: Country Profile and HIV/AIDS scenario extract from - www.youandaids.org

## PAKISTAN

| Indicator | Year | Estimate | Source |
|---|---|---|---|
| Population (millions) | 2000 | 141.3 | Global HDR 2002 |
| Population growth (1999–2001) | N.A. | N.A. | — |
| Annual population growth (%) | 1975–2000 | 2.8 | Global HDR 2002 |
| Population density (per sq. km) | 1998 (census) | 166 | SYAP, UN ESCAP, 2001 |
| Sex Ratio (males per 100 females) | 1998 | 108.1 | Government of Pakistan, Statistics Division, Population Census Organisation, 2002 |
| Crude Birth Rate (per 1000) | 2000 | 32.1 | SYAP, UN ESCAP, 2001 |
| Crude Death Rate (per 1000) | 2000 | 9.5 | SYAP, UN ESCAP, 2001 |
| Total Fertility Rate (per woman) | 1995–2000 | 5.5 | Global HDR 2002 |
| Infant Mortality Rate (per 1000 live births) | 2000 | 85 | Global HDR 2002 |
| Maternal Mortality Ratio (per 100,000 live births) | 1985–99 | N.A. | Global HDR 2002 |
| Human Development Index rank | 2000 | 138 | Global HDR 2002 |
| Adult literacy rates (% age 15 and above) | 2000 | 43.2 | Global HDR 2002 |
| Population below income poverty line(%) ($ 1 a day) (1993) (PPP US$) | 1983–2000 | 31.0 | Global HDR 2002 |
| Urban population (%) | 2000 | 33.1 | Global HDR 2002 |
| Life expectancy at birth (years) | 2000 | 60.0 | Global HDR 2002 |
| GDP per capita (PPP US$) | 2000 | 1928 | Global HDR 2002 |
| Population using adequate sanitation facilities (%) | 2000 | 61 | Global HDR 2002 |
| Population using improved water sources (%) | 2000 | 88 | Global HDR 2002 |
| Public expenditure on health (as % of GDP) | 1999 | 0.7 | Global HDR 2002 |
| Private health expenditure (% of GDP) | 1998 | 3.1 | Global HDR 2002 |
| Physicians per 100,000 population | 1990–99 | 57 | Global HDR 2002 |
| Population with access to essential drugs (%) | 1999 | 50–79 | Global HDR 2002 |
| HIV prevalence among adults (%) | 2001 | 0.1 | UNAIDS 2002c |

Note: N.A. indicates not available

### Country Profile

- Among the low HDI countries, with poor indicators of social development and high levels of external debt.
- One million Afghan refugees living in the border areas.
- Labour migration within and outside the country is common.
- Commercial sex work is widely prevalent.
- Males too engage in sex work.
- Injecting drug use is widespread.
- Absence of universal screening of blood and blood products.
- Low condom usage.
- Low education and literacy levels.
- Low status of women and high rate of female illiteracy.

### HIV/AIDS Scenario

- Estimated HIV prevalence remains low at about 0.1 per cent of the population.
- Cases have been reported from all provinces but appear to have been confined mainly to people engaged in high-risk behaviour.
- Most of the infected persons belong to the 20 to 49 years age group
- Infection through the heterosexual route is the most common cause.
- Infection through contaminated blood and blood products and through IDU also prevalent.
- An estimated 11 per cent of 60,000-100,000 injecting drug users living with HIV/AIDS.

**Source**: Country Profile and HIV/AIDS scenario extract from - www.youandaids.org

## SRI LANKA

| Indicator | Year | Estimate | Source |
|---|---|---|---|
| Population (millions) | 2000 | 18.9 | Global HDR 2002 |
| Population growth (1999–2001) | N.A. | N.A. | — |
| Annual population growth (%) | 1975–2000 | 1.3 | Global HDR 2002 |
| Population density (per sq. km) | 1994(census) | 229 | SYAP, UN ESCAP, 2001 |
| Sex Ratio (females per 1,000 males) | N.A. | N.A. | — |
| Crude Birth Rate (per 1000) | 2000 | 17.3 | SYAP, UN ESCAP, 2001 |
| Crude Death Rate (per 1000) | 2000 | 5.7 | SYAP, UN ESCAP, 2001 |
| Total Fertility Rate (per woman) | 1995–2000 | 2.1 | Global HDR 2002 |
| Infant Mortality Rate (per 1000 live births) | 2000 | 17 | Global HDR 2002 |
| Maternal Mortality Ratio (per 100,000 live births) | 1985–99 | 60 | Global HDR 2002 |
| Human Development Index rank | 2000 | 89 | Global HDR 2002 |
| Adult literacy rates (% age 15 and above) | 2000 | 91.6 | Global HDR 2002 |
| Population below income poverty line (%) ($ 1 a day) (1993) (PPP US$) | 1983–2000 | 6.6 | Global HDR 2002 |
| Urban population (%) | 2000 | 22.8 | Global HDR 2002 |
| Life expectancy at birth (years) | 2000 | 72.1 | Global HDR 2002 |
| GDP per capita (PPP US$) | 2000 | 3530 | Global HDR 2002 |
| Population using adequate sanitation facilities (%) | 2000 | 83 | Global HDR 2002 |
| Population using improved water sources (%) | 2000 | 83 | Global HDR 2002 |
| Public expenditure on health (as % of GDP) | 1998 | 1.7* | Global HDR 2002 |
| Private health expenditure (% of GDP) | 1998 | 1.8 | Global HDR 2002 |
| Physicians per 100,000 population | 1990–99 | 36 | Global HDR 2002 |
| Population with access to essential drugs (%) | 1999 | 95–100 | Global HDR 2002 |
| HIV prevalence among adults (%) | 2001 | <0.1 | UNAIDS 2002c |

* Data refers to 1999

Note: N.A. indicates not available

### Country Profile

- Good health parameters.
- High literacy rate of 90 per cent.
- About 160,000 seek employment abroad annually.
- Significant number of persons employed in West Asia.
- Good immunisation coverage of children against potentially life threatening childhood diseases.
- Unrest in north and the east because of a separatist rebellion.

### HIV/AIDS Scenario

- Low prevalence of HIV/AIDS.
- First case of HIV reported in 1987.
- Fifty-two new cases of infection reported between January and December 1998. However, the number of cases reported falls short of the projections made some years ago.
- Infection still thought to be largely limited to individuals engaging in risk-taking behaviour
- Condom promotion is a sensitive issue, with opposition from the Buddhist and Christian clergy.
- Ninety-eight per cent of blood and blood products screened for HIV; collection of blood from professional donors virtually stopped.
- IDU is not yet a problem.
- Large-scale emigration

Source: Country Profile and HIV/AIDS scenario extract from - www.youandaids.org