HOPING and COPING

A Call for Action

The Capacity Challenge of HIV/AIDS in Least Developed Countries

UN-OHRLLS

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Design by Alamini Design, NYC

Printed by A.K. Office Supplies

Matters of Fact

In the one minute that it takes to read these facts, 10 more people will become HIV-positive. AIDS has killed more than 23 million people worldwide. In 2004 alone, more than 3 million people died, and nearly 5 million became HIV-positive.

Less than 12% of those who need treatment in developing countries receive it. In 2000, patented antiretroviral treatment ranged from US $10,000–$15,000 per patient per year. Today, generic medicines can cost as little as US $140.

HIV/AIDS is a global epidemic—in 54 countries at least 1% of adults are living with HIV/AIDS, and in 27 countries prevalence rates exceed 4%. Nine out of the 10 countries with the highest prevalence are in Southern Africa. Sixteen out of the 27 countries with an adult prevalence rate higher than 4% are Least Developed Countries (LDCs). The prevalence of HIV in the least developed countries is 9 times that of the more developed regions.

Ten years ago, women worldwide made up 38% of people with HIV—now, close to half of adults living with HIV are women. In sub-Saharan Africa nearly six in 10 HIV-positive adults are women. Young women, aged 15–24, are twice as likely to become HIV-positive as men of the same age.

Today, 39.4 million people are living with HIV/AIDS: 25.4 million in sub-Saharan Africa, 7.1 million in South and South-East Asia, 1.7 million in Latin America, 1.4 million in Eastern Europe and Central Asia, 1.1 million in East Asia, 1 million in North America, 0.6 million in Western Europe, 0.5 million in North Africa and the Middle East, 0.4 million in the Caribbean and 35,000 in Oceania.

Sources: *Report on the Global HIV/AIDS Epidemic 2004; UNAIDS Fact Sheets; AIDS epidemic update December 2004 (UNAIDS); Human Development Report 2004 (UNDP); World population monitoring, focusing on population, development and HIV/AIDS, with particular emphasis on poverty, United Nations, 2004.*

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THE SECRETARY-GENERAL

PREFACE

HOPING & COPING: A CALL FOR ACTION

THE CAPACITY CHALLENGE OF HIV/AIDS

IN LEAST DEVELOPED COUNTRIES

July 2005

The problem of capacity, both human and institutional, has long been one of the most pressing issues facing the development community. Among the most vulnerable people in the world are those who live in the Least Developed Countries. They endure economic and natural disasters; they are often subject to political upheaval or armed conflict; they are at greater risk of infectious disease; they have limited access to education, health care and other services. For them, capacity development is an even greater challenge than in the rest of the developing world.

Now, the already overstretched and limited resources of the Least Developed Countries are being eroded by the spread of HIV/AIDS. Of nearly 40 million people living with HIV/AIDS worldwide, 11 million are in Least Developed Countries. More than 25 of these countries have HIV/AIDS prevalence rates higher than 1 per cent; 16 have prevalence rates above four percent; and five have prevalence rates above 12 percent.

This Call for Action, issued jointly by the Office of the United Nations High Representative for the Least Developed Countries, Landlocked Developing Countries and the Small Island Developing States and the United Nations Development Programme, describes the effects of HIV/AIDS on the poorest and most vulnerable segment of the world community. It sets out the plight of the nations that are bearing the brunt of the worst epidemic in human history, while having the least capacity to deal with the immense challenges it presents. More than 700 million women, men, and children live in Least Developed Countries with the spectre of AIDS threatening to unravel the development gains they have painstakingly made. Their predicament, which they

confront with courage, tenacity and innovative approaches, calls for urgent attention and action -- now and in the long-term. Only if we address the linked challenges of building capacity and fighting AIDS can we reach the Millennium Development Goals. Only then can we succeed in our other efforts to build a humane, healthy and equitable world.

Kofi A. Annan

Foreword

"Recognize that the world is hungry for action, not words. Act with courage and vision."

NELSON MANDELA, FEBRUARY 2005,
MAKE POVERTY HISTORY RALLY.

The UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and the Small Island Developing States (UN-OHRLLS) was established in 2002 to provide coordination and follow-up on the implementation of the Brussels Programme of Action (BPoA) for 2001-2010. BPoA is designed to address the special needs of the Least Developed Countries (LDCs), including mobilizing international support and resources for programmes and initiatives to eradicate poverty and improve the quality of life of the people of these countries.

As the UN's global development network, UNDP advocates for change and connects countries to knowledge, experience, and resources to help people build a better life. At the heart of our work lies our support for capacity development. Present in 166 countries, we work with countries to develop their own solutions to global and national development challenges, working with our wide range of partners.

At a time when HIV and AIDS is claiming the lives of society's most productive members in LDCs – including farmers, teachers, medical workers, breadwinners, parents and so many others - UN-OHRLLS and UNDP have come together to help address the challenge of capacity erosion in LDCs as a result of the disease. This joint report is intended to highlight the magnitude of the capacity challenges countries face, where with just ten years left to go until the 2015 deadline on achieving the Millennium Development Goals (MDGs), it is clear we need to urgently review both progress that is being made and the barriers LDCs face in achieving the MDGs.

This report seeks to highlight the challenges and opportunities LDCs and the international community as a whole faces, particularly as we approach the midway point of the Brussels Programme of Action for the Least Developed Countries for the Decade 2001–2010. Given that the challenge of HIV/AIDS today stands as perhaps the greatest threat to capacity development and retention in the LDCs, the core message of this

report is that urgent progress on capacity development in LDCs is fundamental to achieving the goals world leaders agreed to at the Millennium Summit in 2000, to eradicate extreme poverty and achieve sustainable human development as encapsulated in Millennium Development Goals.

This partnership between UN-OHRLLS and UNDP seeks to identify and promote solutions that can contribute to successfully addressing the capacity challenge facing LDCs. These solutions are intended to address capacity erosion caused by migration, natural disasters, and civil conflicts, as well as the policies and actions that can directly address specific HIV/AIDS capacity issues including promoting prevention, care and treatment, and mitigating the social impact of HIV and AIDS.

If LDCs and their development partners take decisive action, there is every hope that we can achieve the goals set out in the Millennium Declaration and the BPoA. To this end, Ten Action Points are laid out in the Executive Summary of this report as proposals that can help the worst affected countries build and sustain the capacity they need for the development of their societies.

Anwarul K. Chowdhury
UN Under-Secretary-General and
High Representative for the
Least Developed Countries,
Landlocked Developing Countries
and Small Island Developing States

Mark Malloch Brown
UNDP Administrator

Acknowledgements

In preparation of this report, UNDP and UN-OHRLLS designated Joseph Annan Senior Policy Advisor (UNDP, HIV/AIDS Group) and Zahra Nuru Director/Senior Advisor to the Under-Secretary General/High Representative (UN-OHRLLS) to guide and act as overall team leaders. Peter Lunding has done tremendous work as the full time consultant and author of the report. Achola Pala supported the development of the structure as well as the initial writing of the report.

During the process, a wide range of experts representing the UN system have given advice, forwarded suggestions, and provided key inputs. A key element in this process was a large readers' group meeting held on May 16, 2005. Special thanks for the comments and input from the readers' group. We thank Nelly Ahouilihoua (UN-OHRLLS), Sandagdorj Erdenebileg (UN-OHRLLS), Metsi Makhetha (UNDP), Om Pradhan (UN-OHRLLS), Dorothy Rosenberg (UNDP), and Bharati Silawal (UNDP). Delanyo Dovlo provided valuable input on the global dimension of health sector capacity challenges.

Additional thanks go to the team that undertook the country reviews in Ethiopia, Lesotho, Nepal, and Uganda, including Alan Saunders, Chris Baryomunsi, Rahel Shiferaw Mengesha, Kishor Kumar Rajbhandari, and Mamotsamai Ranneileng.

UNDP and UN-OHRLLS also wish to thank the many colleagues on the Governance and HIV/AIDS network, who, through their participation in the e-discussion *Human and Institutional Capacity: Governance and HIV/AIDS in LDCs*, contributed to the development of this report.

UNDP and UN-OHRLLS also acknowledge the valuable support of Malikana Musuqua, who assisted with data collection, and of June Saunders for her great patience and editing skills. Finally, many thanks to the UNDP HIV/AIDS group for their numerous contributions and advice.

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Treatment
ARV	Antiretroviral
BPFA	Beijing Platform for Action
BPoA	Brussels Programme of Action
CEDAW	Convention on Elimination of All Forms of Discrimination Against Women
CHAGA	Commission on HIV/AIDS and Governance in Africa
CRC	Convention on the Rights of the Child
DFID	Department for International Development
EHA	Education for Health in Africa
FAO	Food and Agriculture Organisation
GDP	Gross Domestic Product
GTZ	Gesellschaft für Technische Zusammenarbeit
HIPC	Highly Indebted Poor Country
HIV	Human Immunodeficiency Virus
ICIPE	Insect Physiology and Ecology
ILO	International Labour Organization
IT	Information Technology
JLI	Joint Learning Initiative
LDC	Least Developed Countries
MDGs	Millennium Development Goals
MUSTER	Multi-Site Teacher Education Project
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PLWHA	People Living With HIV/AIDS
PRSs	Poverty Reduction Strategies
PRSPs	Poverty Reduction Strategy Papers
SACI	Southern Africa Capacity Initiative

SADC	Southern African Development Community
STDs	Sexually Transmitted Diseases
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNGASS	United Nations General Assembly
UNICEF	United Nations Children's Fund
UN-OHRLLS	United Nations Office of the High Representative for The Least Developed Countries, Landlocked Developing Countries and Small Island Developing States
USAID	US Agency for International Development
VSU	Victim Support Unit
WHO	World Health Organisation

Executive Summary

The Brussels Programme of Action for the Least Developed Countries (2001–2010) outlined the basic tenets for key policy directions in order to honour its commitments to guide national and international action addressing the LDCs' vulnerability. The Millennium Development Goals (MDGs) provide a framework for a renewed global effort to eliminate abject poverty, reduce disease burden, improve education, ensure gender equality, protect biodiversity and the environment, and strengthen global partnerships and development cooperation.

One of the major challenges the international community faces is the impact HIV/AIDS has on the ability of countries to achieve the MDGs. Nowhere is this challenge more evident than in LDCs. The epidemic has already radically altered the development landscape in many of these countries and is likely to affect the vast majority of all 50 countries. The Secretary-General's recent report *In Larger Freedom* underscores how the epidemic now poses a threat, slowing economic growth and undermining governance. This for the LDCs in particular is an unmitigated disaster.

Specific development objectives have been set for 2010 in the Program of Action for LDCs to allow them to redouble their efforts and readjust their strategies to achieve the targets of the Millennium Declaration. The BPoA contains seven commitments. Commitment 3, Building human and institutional capacities, is the most important for the purpose of this paper.

Evidence shows that the HIV/AIDS epidemic is eroding human capacity and in turn affecting institutional capacity accumulated through years of social and economic investment made by families and communities, governments, businesses, and international development partners. Civil society and community-based institutions are equally affected, posing an added challenge to community empowerment and democracy. The epidemic is deepening poverty, reducing productivity, and undermining all aspects of development.

Prior to the onset of the HIV/AIDS epidemic, life expectancy at birth had shown positive trends of increasing to over 50 years in some LDCs. However, in the last decade, following the wave of the epidemic, life expectancy has plummeted to an alarming level, reaching almost 39 years in some LDCs. This demographic reality poses one of the most important development challenges of our time. Mortality caused by HIV/AIDS impacts

The Brussels Programme of Action for the Least Developed Countries (2001-2010)

A Framework for Partnership:

Commitment 1: Fostering a people-centred policy framework

Commitment 2: Good governance at national and international levels

Commitment 3: Building human and institutional capacities

Commitment 4: Building productive capacities to make globalization work for LDCs

Commitment 5: Enhancing the role of trade in development

Commitment 6: Reducing vulnerability and protecting the environment

Commitment 7: Mobilizing financial resources

The Millennium Development Goals (2000-2015)

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development

society from the upper political echelons to the most remote rural villages. It impacts education, health care, the labor force, and the economy, from the city down to the rural household garden. Poverty and AIDS reinforce one another in an ever-downward spiral.

Agriculture is an economic mainstay of many LDCs. In Africa, agriculture accounts for 24% of the continent's GDP, 40% of its foreign exchange earnings, and 70% of its employment. Yet in Malawi, staff shortages in the Ministry of Agriculture and Irrigation are alarming. A UNDP report from 2003 reveals that in Zambia, mortality in the public agriculture sector increased more than 100% between 1990 and 1998.

Women constitute the main workforce in agriculture and are particularly vulnerable to the disease and its ravages. In Uganda alone, women produce 75% of the country's food and comprise 80% of the agricultural labour force. As AIDS and its effects increasingly affect women, food production will naturally suffer.

In 1997, women represented 41% of people living with HIV worldwide. In 2004, the figure had risen to almost 50%. In sub-Saharan Africa, 58% of HIV-positive adults are women, and 75% of HIV-positive young people are women and girls.

Women not only contract the disease more often and easily than men, but their prescribed roles as caregivers for the sick and dying, as well as providers for the stability and subsistence of the family, also create an even greater challenge at the household level and in communities. This depletes capacities already diminished by grinding poverty. It has effectively changed the various gender roles, increased the numbers of orphans and child heads of households, and it has altered the landscape of human relationships in rural societies.

Ultimately, HIV/AIDS poses a critical threat to the very fabric of society: it fundamentally undermines development capacity and chips away at social cohesion. One way in which it does this is through the special vulnerability of women to the disease and its ravages.

The global community has therefore committed itself to combating the spread of the epidemic in order to increase choices and expand opportunities for the poor in LDCs and to enable them to benefit equitably from sustainable development.

The case for LDCs

While some developing countries have made significant progress toward achieving the MDGs, the situation in the majority of developing countries, especially in the LDCs, continues to be difficult. The LDCs, with a population of over 700 million, already face greater deficits in the human and institutional capacity needed to achieve an adequate measure of sustainability in the areas of economic and social development, macroeconomic policies households and communities.

Historically, many LDCs inherited a post-independence governance system not entirely tailored to national development needs and capacity development. This and wider issues of market access and trade including tariff and quota-free access for exports, as well as an unpredictable international financial system are fundamental reasons why LDCs remain seriously affected by poverty, lack of development opportunities, and capacity erosion. To ensure the broader global benefits accruing from successful implementation of the MDGs, LDCs would need to garner greater support both from themselves and from the international development community to overcome these historical, current, and emerging constraints and challenges.

Turning hope into results

This report addresses key aspects of the challenges to human and institutional capacities of LDCs posed by HIV/AIDS. It analyses how threats to capacity affect present and future ability to generate economic and social development. The report also focuses on success stories, effective practices and policies, thus providing insights into how hope can be translated into long –term results.

Given the centrality of a rights-based approach, including the principles of equity and equality in sustainable development, the report also analyses the differential effects of the HIV/AIDS epidemic on economies and on women, men, and children as agents of development and social change. The report underscores human development on the premise that the purpose of interventions is to contribute to the fulfilment of people's aspirations to live long, dignified, and productive lives. On the basis of this analysis, the report identifies policy issues and strategies that may mitigate the diverse capacity challenges, seeking alternative approaches.

Strategies that have turned hope into results in some of the countries studied include a wide range of responses, encompassing strides made toward free elementary school, enabling families and especially girls to pursue education, effective HIV/AIDS prevention strategies such as the ABC program in Uganda, addressing governance issues through anti-corruption, anti-abuses bills and directives such as in Nepal, and the creation of an actual Ministry of Capacity in Ethiopia.

Irrespective of their immediate causes, circumstances that exacerbate capacity challenges tend to have similar underpinnings and often require similar solutions. The analysis, therefore, explores strategy and policy commonalities across the broader underlying causes of insufficient human and institutional capacities for development. To achieve this, a particular framework for analysis was adopted. It ascertains how human and institutional capacities are affected in order to understand what happens, and what needs to be done, to key national capacities crucial for development. Areas reviewed include: attrition, competencies and skills; strategy and policy development; implementation and service delivery; and the overall governance environment, including leadership and empowerment issues.

A call for action

This report's core message concludes that urgent tangible action must be undertaken by LDCs and their development partners, irrespective of the current stage and perceptions of the HIV/AIDS epidemic and challenges to their capacity for development. The focus is clearly to accelerate capacity development in the face of multiple constraints. The major challenge is how to achieve this.

It is obvious that without a significant acceleration in development efforts in LDCs, very few of the global development targets, including the Millennium Development Goals, can be met. It is equally evident that the AIDS epidemic is undoubtedly worsening the prospects for success in many LDCs, particularly because of its effects on human capacity and impact on institutional development in the most vulnerable countries, hampering their ability to generate real economic and social development.

To urgently address the development capacity challenges faced by LDCs, this report proposes ten action points that will accelerate efforts of both developing and developed countries to achieve the targets and milestones set by the Millennium Declaration and the BPoA.

Ten Action Points

1. **Stakeholders are obliged to explore innovative human resource maintenance approaches in order to contribute more effectively to capacity development.**

   There are no simple blueprints for national capacity development. However, innovative strategies that can change the prevailing governance and institutional norms and values must be carefully explored. These innovations can create renewed commitment and non-financial incentives while reducing push factors for migration and retaining much-needed skills. Increasing the numbers and quality of human resources through affirmative action that targets girls, women, and often-marginalized groups is a useful long-term approach. Information Technology is an innovation that can assist in more rapidly developing skills and competencies. Business-as-usual policy responses will fail to provide sufficiently creative solutions in the face of the growing epidemic.

2. **Sub-regional and regional initiatives addressing capacity issues should be expanded to benefit all LDCs.**

   Many LDCs are at a critical crossroad, facing a daunting human capacity challenge exacerbated by the inter-locked and inter-related impacts of HIV/AIDS, poverty, and recurring natural disasters. The resulting weakened capacity for development demands a wider multi-country perspective. Sub-regional and regional initiatives

can provide a broader development and macroeconomic framework, enabling LDCs to develop new human capacity development models, and access technical resources, e.g. regional organisations can develop policies on recruitment that better manage migration and benefit both source and destination country.

3. In response to the capacity challenge posed by AIDS, strategies mitigating the direct impact of the epidemic on human capital must be adopted.

To sustain adequate service delivery, prolonging the productive life of people living with HIV/AIDS is an urgent requirement for countries experiencing capacity constraints. Programmes including workplace-based treatment and care need to be aggressively implemented. All service-providing institutions should allocate a percentage of their total budget for supplementary capacity development. On the wider policy level, actions include re-examining human resource planning models, re-examining the basis of establishment registers, examining how existing governance and organisational structures impede or facilitate service delivery, revising training curricula, and factoring in the "brain drain" in human resource planning and development.

4. Scaling up the use of mid-level health cadres, including community health workers and medical assistants, will significantly contribute to capacity in the health sector.

AIDS and migration are rapidly eroding capacity within the health sector at a time when the skills are most needed to meet increasing health demand. Mid-level health cadres are often able to provide numerous healthcare delivery services, and are fully able to supplement more traditional professional categories. In opting for mid-level health workers, many LDCs could prioritize issue of training and training periods, achieve a measure of cost-effectiveness, and perhaps limit out-migration. Additionally, a number of LDCs have experience with long-term south-south cooperation, where medical brigades have successfully supported and trained mid-level cadres. Practical actions include re-examining areas of responsibilities between doctors, nurses, and other health cadres, budget support for paying and educating health sector staff, and providing additional incentives through training and responsive management.

5. Key development sectors should integrate human resource strategies into both their short- and long-term plans and strategies in response to the effects of AIDS.

External shocks and diseases such as HIV/AIDS affect human resources in key sectors disproportionately, depleting competencies and skills in ways that are often unpredictable. Thus, it is imperative to focus on both emergency and long-term strategies addressing capacity erosion in key sectors. Immediate action must be

taken in both high and low prevalence countries to address current and upcoming human resource challenges. Failure to adopt emergency and long-term planning approaches simultaneously will result in ad hoc measures likely to be unsustainable as capacity deficits deepen.

6. Leaders and policy makers should actively implement existing conventions and policies that support gender equity and equality.

In order to increase and accelerate capacity development, LDCs need to vigorously address the special situation of women and girls through policies and actions that support gender equity and equality. Key global policy instruments include the Beijing Platform for Action (BPFA) and outline a wide range of policy options and recommendations for actions that influence capacity issues. The Convention on the Rights of the Child (CRC) and the Convention on Elimination of All Forms of Discrimination Against Women (CEDAW) are important instruments that also support policies to achieve gender equality and strengthen human resources through affirmative actions. It is critical that these conventions and their Optional Protocols are ratified and implemented by 2006 the mid-term of BPoA. Failure to vigorously pursue these commitments will sustain the capacity gap in development.

7. Social protection measures must be widely adopted to assist affected families and households.

Capacity depletion through AIDS dramatically affects the capacities of individuals, families, and households to reach full human potential. Securing the rights of women, including the right to own and inherit family property (a basic human right), is a clear action that can enhance social protection. Abolishing school fees and health care user charges will improve access to education for poor children and provide more equitable access to health care for families. These protection measures will improve the chances of children, especially girls from AIDS-affected families, to stay enrolled and complete school. Policy shifts of this nature are entirely consistent with achieving the MDGs and should be factored into the long-term national MDG plans to be developed by 2006.

8. Specific human resource strategies for conflict, post-conflict, and other emergency situations have to be adopted in order to address the resultant capacity erosion.

Many LDCs are in conflict or recovering from conflict. National and international responses to conflict and post-conflict situations must therefore embrace a human and institutional development approach early on. To ensure sustainability of capacity development efforts, these must be nested in the local reality, however unstable the country may be. For many LDCs, these situations can provide an opportunity to re-examine issues of inequality and discrimination in light of reconstruction and governance while finding new ways to redress historical inequalities and discrimination.

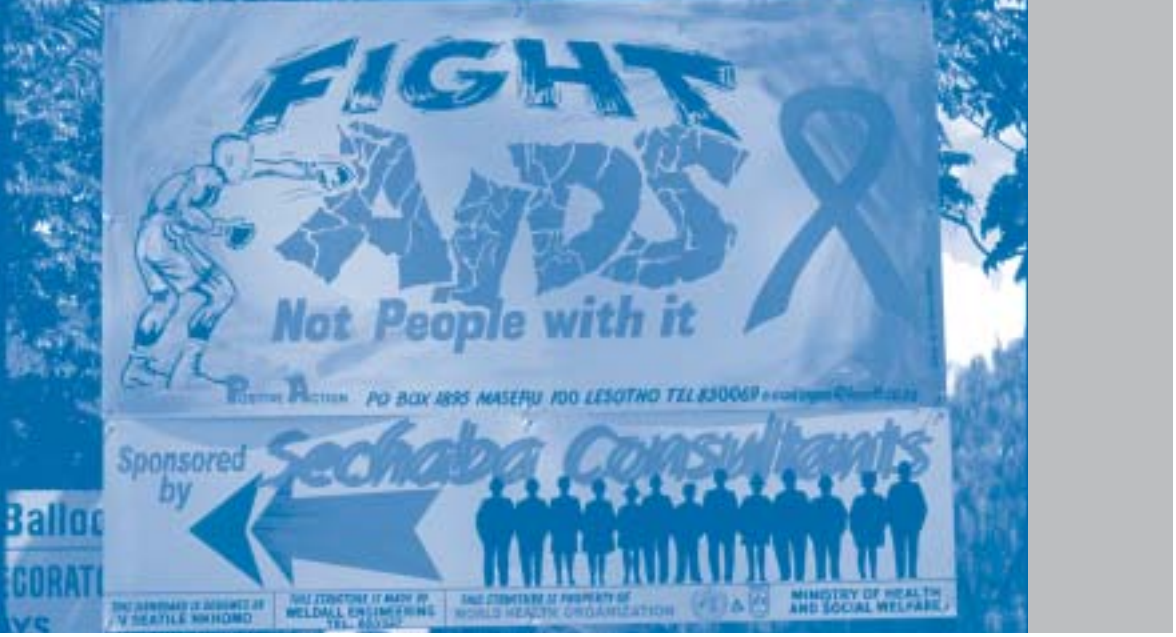
9. It is now necessary for the international community to take decisive action to address the multiple capacity challenges facing LDCs.

In line with Goal 8 of the MDGs: "Develop a Global Partnership for Development," taking action to address the capacity challenges blocking the achievement of the internationally agreed upon development goals is critical. For example, developed countries should evaluate recruitment practices of public and private health providers in particular, and implement strategies that will protect the human resources in LDCs. Strategies could include ending active recruitment from worst affected countries.

10. Long-term commitments must be made for capacity development in LDCs, and additional ODA resources earmarked for this purpose.

Capacity for utilization of ODA dedicated to accelerating economic growth and delivery of basic social services needs to be supported and strengthened. Integrating and costing human and institutional strategies into development instruments such as National Development Strategies, PRSs, and HIPC documents will ensure that the capacity necessary to carry out development matches ODA . Resultant programmes will assist in building and utilizing local capacity.

Countries undertaking review and second generation PRSs in 2005-06 must now align human capacity development requirements within such frameworks. The long term cost of attaining adequate human resources necessary for basic service delivery should be factored into macroeconomic policy planning, economic estimates, and national development plans. Programmes critical to social sectors in LDCs should be exempt from budget and wage ceilings imposed by international financial institutions. In the absence of this, the thorny issue of lack or poor absorptive capacity cannot be put to rest. Much of this is linked to achieving progress on the Paris Declaration on Aid Effectiveness and the "Three Ones" principles for AIDS coordination, with faster progress on harmonization and more flexibility in aid provision.



1 An Overview of HIV/AIDS and Capacity

A number of developing countries have made great strides in their efforts towards achieving agreed targets of the Millennium Development Goals (MDGs). In order for the international community to achieve the MDGs within the next ten years, it is indeed paramount that the vast majority of developing countries make rapid progress towards reducing poverty, improving education, achieving gender equality, improving health (including combating AIDS), and ensuring a sustainable environment in which to live.

The Secretary-General's report *In Larger Freedom* stresses that AIDS poses an unprecedented threat to human development and undermines economic and social stability. The report also emphasizes that sufficient investments and large numbers of motivated people are required to achieve the broader aims of sustainable development (United Nations, 2005). To achieve these development goals, it is imperative that the LDCs in particular are enabled to swiftly undertake investments in building sufficient human resources in order to accelerate their growth and development processes in a sustainable way.

This goal of accelerated and sustainable development requires LDCs to pointedly enhance their capacity for development. This by itself constitutes a considerable challenge, since by definition an LDC is classed as having a human resource weakness. Nevertheless, to achieve the far-reaching MDGs across LDCs, significant investments in human resources are urgently needed. Health, education, agricultural extension, and other critical social services cannot be attained without cadres of healthy and well-trained staff.

1.1 Hoping and Coping

It is in this context UNDP and the United Nations Office of the High Representative for Least Developed Countries (UN-OHRLLS) have jointly decided to address the HIV/AIDS challenge to capacity and generate the necessary international support to respond

decisively. The partnership has taken some practical steps. Advocacy efforts and publications have been issued and launched. A joint report reviews and advocates positions on issues of LDCs' human and institutional capacity essential to achieving the LDC BPoA by 2010, and the MDGs by 2015. The collaboration draws on experiences and country reviews that have clearly indicated an emerging capacity crisis caused by the HIV/AIDS epidemic in several of the LDCs. Further, it seeks to analyse policy issues and identify policy options and strategies that can enable LDCs to meet the challenges to their human and institutional capacities.

1.2 A compelling case for LDCs

The LDCs constitute a varied group of nations. The 50 countries are located in Africa, Asia, the Pacific, and the Caribbean. However, despite their geographical diversity (some of them are also landlocked or small islands), they share a number of common traits:

- Low-income: under $750 GNI per capita for inclusion, above $900 for graduation
- A human resource weakness, based on indicators of: (a) nutrition; (b) health; (c) school enrolment; and (d) adult literacy
- Economic vulnerability, based on indicators of: (a) the instability of agricultural production; (b) the instability of exports earnings of goods and services; (c) the economic importance of non-traditional activities; (d) merchandise export concentration; and (e) the handicap of economic smallness (size of population); and the percentage of population displaced by natural disasters.

Achieving the numerous internationally agreed upon development goals, including those contained in the BPoA, the Millennium Declaration, and UNGASS, requires unprecedented attention to the LDCs.

Box 1

The 50 countries classified as LDCs are: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sâo Tomé and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Timor-Lesté, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen and Zambia.

Achieving the numerous internationally agreed upon development goals, including those contained in the BPoA, the Millennium Declaration, and UNGASS, requires unprecedented attention to the LDCs. They must generate and retain sufficient human

and institutional capacity. Various factors, such as conflicts, natural disasters, underperforming governance structures, and HIV/AIDS continue to erode and undermine the development capacities of countries. Further, in many countries, years of public sector wage ceilings and hiring freezes, outward migration, and poor working conditions have contributed significantly to the decline in human resources.

Over the past two decades, the relentless growth of the HIV/AIDS epidemic has drastically added to the range of capacity challenges facing many LDCs. In the worst affected countries, for example, life expectancy of the most productive segments of society has been reduced by a third. This seriously reduces the number of skilled professionals such as nurses, doctors, teachers, and policy makers.

Sixteen of the LDCs are landlocked developing states, causing additional challenges to their capacity to generate development. Landlocked countries are often at a major competitive disadvantage as exporters of the high bulk/low value product that comprise many developing countries' commodity exports due to high freight and insurance costs incurred in the transit to the sea (Ng & Yeats, 2003).

Where political instability has been manifest, capacity is adversely affected. Significantly more than half of the LDCs are either in conflict or in post-conflict transition towards development. In several of these countries, humanitarian disasters have eliminated up to and beyond 50% of a country's educated professionals. Additionally, many LDCs regularly experience natural disasters, which add to the erosion of their human capacities. Analysis of this wide range of factors affecting capacity will provide valuable policy lessons on how to tackle capacity erosion and provide insights into the acceleration of capacity development.

1.3 Achieving the BPoA

Responding to the special needs of LDCs, a United Nations Conference on the LDCs was held in Brussels, Belgium in May 2001. At this conference, the international community adopted the Brussels Programme of Action (BPoA) for the Least Developed Countries for the Decade 2001–2010. While the BPoA is an important goal on its own, fulfilling it is clearly a prerequisite for the LDCs to reach the broader MDGs by 2015. Additionally, the 2010 benchmark will provide an important opportunity for the LDCs and the international community to redirect resources and energize policy initiatives in order to achieve the MDGs by 2015. The BPoA states the following priorities:

A) A significant reduction in extreme poverty

B) *Developing human and institutional resources to support sustained growth and sustainable development*

C) *Removing supply-side constraints and enhancing productive capacity and promoting the expansion of domestic markets to accelerate growth, income and employment generation;*

D) *Accelerating LDCs' growth with the aim of enhancing their share in world trade and global financial and investment flows*

E) *Environmental protection, accepting that LDCs and industrialized countries have common but differentiated responsibility*

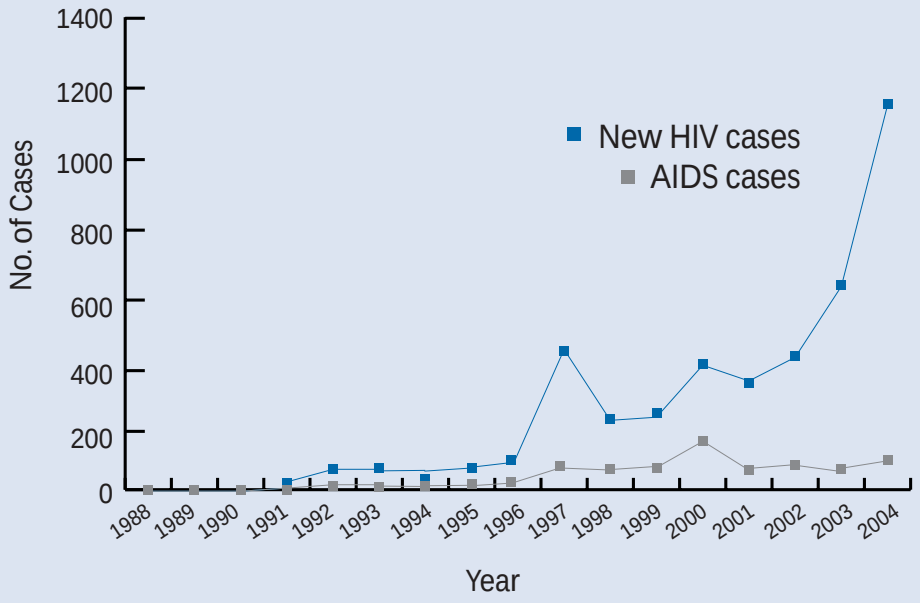
F) *Attaining food security and reducing malnutrition*

To achieve these goals a number of commitments were made. A key commitment of the BPoA is Commitment 3, which addresses human and institutional capacities:

Efforts at development of human capacities in LDCs have been affected by low school enrolment and low health, nutrition and sanitation status and by the prevalence of the HIV/AIDS epidemic, particularly in Africa.

This Commitment explicitly recognizes that generating the necessary capacity for development constitutes the single most important challenge if the LDCs are to accelerate towards achieving the goals of the BPoA and the Millennium Declaration.

Figure 1 | Reported HIV and AIDS cases in Nepal in the period of 1988 till 2004



Source: *National Centre for AIDS and STD Control, Ministry of Health, 2005 in Nepal Country Review, 2005.*

1.4 HIV/AIDS: the double jeopardy

HIV/AIDS has manifested itself as a most serious barrier to development in the worst affected countries, taking a grim toll on their social fabric, governance, and on their human and institutional capacities. For many countries, HIV/AIDS is doubly a drastic humanitarian crisis and a long-term development challenge. Accordingly, unless addressed decisively and effectively, the HIV/AIDS epidemic will endanger the human and institutional capacities of LDCs, jeopardizing their development prospects and in some cases even reversing development results.

HIV/AIDS primarily affects people in the most productive age bracket and by its impact on human and institutional capacities the epidemic erodes the productive base of the affected societies and creates severe economic and a social difficulties. A vicious cycle is created when the HIV/AIDS epidemic erodes human and institutional capacities and rolls back economic and social development. Development gaps increase people's susceptibility to HIV transmission and their vulnerability to the impact of AIDS; the epidemic itself hampers or even reverses development progress.

The HIV/AIDS epidemic is a long-lasting challenge, which is evidenced by increasing prevalence, AIDS deaths, and wider impacts. The world is in the third decade of the epidemic, and its impacts are seriously affecting an increasing number of LDCs. As impoverished families try to cope with HIV/AIDS-associated morbidity and mortality, a significant depletion of assets usually occurs, sending many into destitution. Community safety nets are breaking down, as many households require assistance to meet their food, cash, care, and labour needs. The epidemic is also decimating staffs of governmental as well as non-governmental institutions, contributing to a wider social and governance breakdown.

It is crucial that responses are comprehensive and decisive, not only in the worst affected countries, but also in low prevalence countries.

It is crucial that responses are comprehensive and decisive, not only in the worst affected countries, but also in low prevalence countries. As the Nepal Country Review clearly illustrates, countries with low prevalence rates and concentrated epidemics run a high risk of experiencing rapid growth in the number of HIV infections, and concentrated epidemics are permanently at risk of transcending into generalised epidemics.

In this report, emphasis is placed on identifying practical policies, programmes, and actions that will be able to mitigate threats to the human and institutional capacities of LDCs. The aim is first to enable LDCs to cope with the HIV/AIDS-caused capacity challenge. A later aim is to go beyond coping to creating hope and turning this hope into measurable results contributing to the completion of the MDGs.

2 Human and Institutional Capacity: A Key to Accelerated Development

Reviewing and advocating issues regarding the LDCs' human and institutional capacity is essential for achieving the BPoA by 2010 and the MDGs by 2015. It is crucial to clarify the scope and nature of the challenges that LDCs face with regard to their capacity for development. The framework for analysing capacity issues will also explain why LDCs deserve special attention.

With regard to the threats to capacity, priority will naturally be given to the special case of the HIV/AIDS epidemic. However, findings and results will be positioned broadly across different capacity challenges derived from other causes as well. Clearly, some of the issues, such as those addressing treatment and prevention of HIV/AIDS, cannot be easily extrapolated beyond the epidemic. However, most of the recommendations are expected to be broadly applicable, addressing a range of capacity challenges.

2.1 A Framework for Capacity Issues

Capacity development is a long-term process that builds on available national human resources and assets. On the whole, capacity is about learning and adapting knowledge to achieve an increasingly higher level of returns in economic and social development. This can be seen as taking place on three interrelated levels: the individual human level, the institutional, and the societal levels. In this report, the framework for analysis focuses on what happens to the first two when affected by HIV/AIDS. However, it also examines the effects when a society's ability to develop is compromised and the overall governance implications of such changes.

This report does not attempt to address all aspects of capacity. However, to better understand capacity challenges and to explore appropriate responses, it is essential to clarify the notions of human and institutional capacity. Human capacity is the

knowledge, skills and know-how of individuals, either acquired through formal training and education or acquired though informal on-the-job training, practice, and informal research. While this is essentially a qualitative exploration of individual competencies and skills, the analysis will also explore the quantitative aspect of human capacities; that is, the numbers required to meet the development challenges of LDCs.

In simple terms, an institution's capacity is its potential to perform, its ability to successfully apply its skills and resources to accomplish its goals, and to satisfy its stakeholders' expectations. Capacity is often analysed along three analytical dimensions. Institutional resources consist of basic legal structure, access to human, financial, technical, and other resources, and management systems. Institutional performance is a measure of progress, quantifying how effectively institutional resources are deployed. Institutional sustainability incorporates more forward-looking attributes such as organisational autonomy, leadership, and learning capacity, which in turn help ensure sustainability and self-reliance in the future.

From the above it is clear that institutional capacity development does not only focus on the resources available to an organisation, but also on the organisation's internal processes, including a gender perspective.

The *framework for analysis* examines human and institutional capacities together and thus considers what needs to happen to the key national capacities critical for development: 1. competencies and skills; 2. strategy and policy development; 3. implementation and service delivery; and 4. the overall governance environment, including leadership, empowerment issues, and sanction and reward systems.

In a significant number of countries there is a noticeable dual erosion of human and institutional capacities. This highlights the need for urgent and resolute action with regard to protecting and developing the human capacities of LDCs.

In a significant number of countries there is a noticeable dual erosion of human and institutional capacities. This highlights the need for urgent and resolute action with regard to protecting and developing the human capacities of LDCs. At the same time developing new and innovative ways to prevent any decline in instittional capacities is a must. As an example of how this challenge can be addressed, Ethiopia has as of 2001 established a Ministry of Capacity Building (Ethiopia Country Review, 2005).

Since capacity development is an unavoidable prerequisite for social and economic development, the emerging capacity challenge is directly threatening the development of many LDCs, and thus jeopardizing the international community's ability to achieve the MDGs. The specific ways in which HIV/AIDS negatively affects conditions for development will be further explored below.

2.2 Understanding the challenge is the basis for action

Across the world, a number of diverse capacity challenges have manifested themselves through their effects on the outcomes of development initiatives. These diverse challenges include armed conflicts, out migration, poor governance, and natural disasters such as drought, flooding, and earthquake. The mechanisms causing capacity erosion differ, but the outcomes are very similar. The largest differentials in outcomes are those between men and women, boys and girls.

In situations of armed conflict, the civilian population suffers immensely. Obvious examples are the effects of massive loss of civilian populations such as in Rwanda and Cambodia under the Khmer Rouge, where human capacity has been directly targeted and in places, virtually eliminated.

However, when human capacity is not an explicit target, civil unrest still has significant effects on capacity and capacity development. In Nepal, an ongoing insurgency accelerates migration from the countryside to cities, causing the population of the capital to more than triple within a few years (Nepal Country Review, 2005). In Uganda, due to a rebellion in the northern part of the country, an estimated population of 1.6 million are internally displaced, living in camps, often in deep poverty, and dependent on food aid (Uganda Country Review, 2005).

Migration is another challenge that can have a serious impact on a nation's human capacity. In some cases, often when strong push effects are present, there will be a high level of migration, taking a deep toll on a country's human resources. In other cases, often when strong pull effects are in place, it is specific and often essential groups of professionals who decide to leave their native countries behind.

The capacity for good governance presents a challenge in many countries. In situations of poor governance, human capacity development is often neglected, and schools and universities are often seriously underfunded. In these cases, insufficient attention is paid to institutions to assure accountability, transparency, decentralisation, and democratisation. Such political opportunism often significantly limits institutional capacities, undermining efficiency, equity, and effectiveness.

Similarly, natural disasters including drought, flooding, tsunamis, and earthquakes can severely affect a population and the human resources available. Many of these threats are well known in the affected countries, and over time many have begun to develop partial coping strategies. Today these traditional challenges are becoming more complex due to the escalating HIV/AIDS epidemic, which undermines capacity in general.

The capacity for good governance presents a challenge in many countries. In situations of poor governance, human capacity development is often neglected, and schools and universities are often seriously underfunded.

Box 2

Country Close-Ups: LDCs State Some Causes of their Capacity Challenges

(Country Reviews, 2005, Ethiopia, Lesotho, Nepal, Uganda)

HIV/AIDS—a most serious current and/or imminent threat to capacity:

- *Ethiopia*—The infection rate of HIV/AIDS is 4.4. %, and more than 1.5 million people are living with AIDS.
- *Lesotho*—The adult prevalence rate is 28.9%. The Lesotho Ministry of Health and Social Welfare is struggling to overcome the dual challenge from losing staff to AIDS and migration as well as rapidly increased demand for its services as the epidemic spreads.
- *Nepal*—While HIV/AIDS is a concentrated epidemic, the number of new cases are rising.
- *Uganda*—The level of HIV/AIDS has gone down from 18.5% in 1992 to 6.2% in 2004, yet it is still the leading cause of mortality among people aged 15-49 years old.

Migration-or displacement due to civil unrest-is an important human capacity issue

- *Ethiopia*—The Addis Ababa University states that 40-50% of its staff who went abroad for postgraduate studies never returned. The war with Eritrea also increased out-migration.
- *Lesotho*—Lesotho is subject to intense "brain drain" because of being geographically surrounded by the Republic of South Africa. 23.7% of Lesotho's working population is employed in Republic of South Africa. Civil unrest from the time of independence culminated in major conflict in 1998, which was stopped with the intervention of Southern African Development Community (SADC) forces. Gains worth R160 million were lost.
- *Nepal*—Internal migration from the rural areas to the cities in pursuit of education, economic, job, or physical security (there is an ongoing Maoist insurgency) is placing heavy burdens on the infrastructure of urban areas.
- *Uganda*—Civil unrest in the north has resulted in 1,600,000 people living in protected camps, where making a livelihood and escaping disease constitute an ongoing challenge.

Poverty, Food Insecurity

- *Ethiopia*—At least 44% of the population is experiencing food insecurity.
- *Lesotho*—35% of the population is in absolute poverty; 60% in poverty.
- *Nepal*—Numbers of people in absolute poverty have increased since the 1980s.
- *Uganda*—Poverty in the north has increased from 63% in 2001 to 67% in 2004.

Natural Disasters

- *Ethiopia*—Drought places 10 million more people at risk of food insecurity.
- *Lesotho*—Drought and erratic rainfall affect agricultural output.
- *Nepal*—Natural disasters are seen as something the government should provide security against.
- *Uganda*—Landslides, droughts, and flooding have an impact on capacity

2.3 Equity and poverty policy options

The focus of this analysis is the LDCs and their special needs. However, since wealth is unevenly distributed, many middle-income countries (for instance in Latin America) have pockets or geographical areas and social groups who share the difficult conditions of the LDCs. They too will be able to significantly benefit from the policy issues and recommendations.

The strong relationship between income growth and poverty reduction has been well documented in much of the development literature. Research indicates important differences across countries in the rate at which poverty declines for a given growth rate. A key factor explaining this variation is the difference in income distribution. More equal income distribution clearly accelerates poverty eradication (World Bank, 2005).

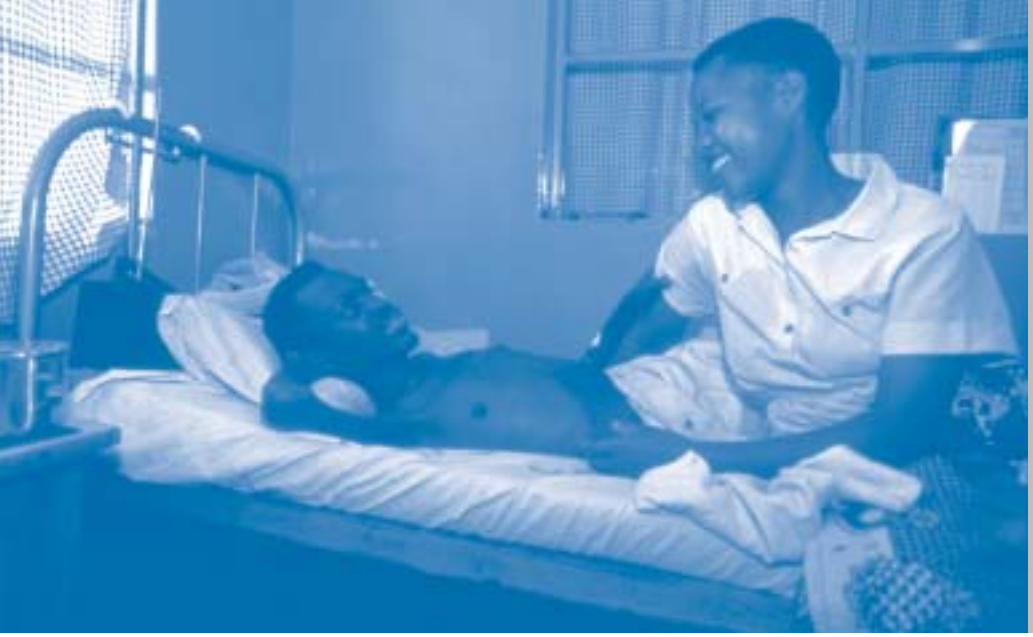
Gender inequalities in distribution of income remain an important issue. Even in the high growth economies of South-East Asia, equal income distribution is not a given. In fact, in these societies, gender inequalities in income distribution have tended to increase. The labour intensive export industries still discriminate against women, so women often end up as low paid domestic helpers in the midst of a growing economy. If equal income distribution is linked to the eradication of poverty, gender issues are an important consideration.

Research indicates important differences across countries in the rate at which poverty declines for a given growth rate. A key factor explaining this variation is the difference in income distribution. More equal income distribution clearly accelerates poverty eradication

2.4 Drawing lessons for development

Drawing on lessons from a range of human capacity challenges, this document aims to identify good practices and recommend appropriate policies. While the aim is primarily to enable LDCs to respond to the erosion of human capacity caused by the HIV/AIDS epidemic, recommended actions and policies are expected to have broader applications.

Many of the causes of capacity erosion that challenge the attainment of the MDGs have similar underpinnings. Thus the policy recommendations and good practices identified during this analysis will often be applicable across diverse scenarios. Further, the focus of the analysis will be on the challenge to LDCs, but many of the solutions and recommendations of the analysis will be just as valuable in more developed countries, especially in poorer areas—the so-called poverty islands.



3 HIV—a serious threat to MDGs

3.1 A threat to development

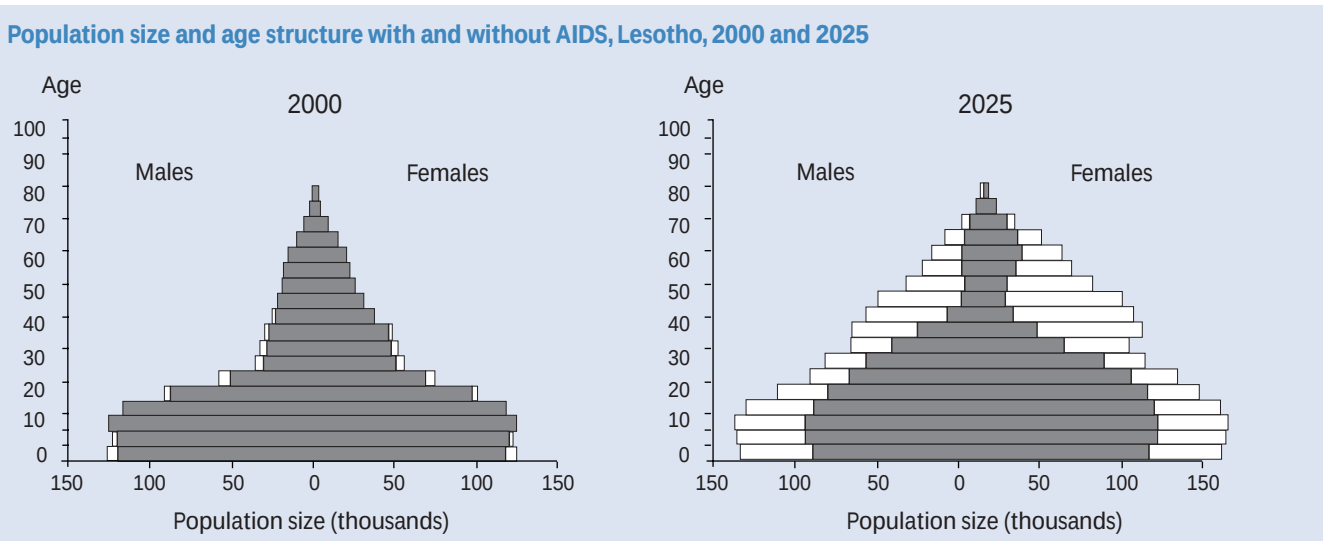
HIV/AIDS primarily affects people in the most productive age bracket. Therefore, the epidemic has long transcended being a serious health issue to become a threat to social and economic development of the most affected countries. It has the potential to reverse and even eliminate the progress made during the last 50 years. Through its impact on human and institutional capacities, the epidemic erodes the productive base of affected societies and creates severe economic and social difficulties. This directly and indirectly affects the outcomes of the 18 targets of the Millennium Declaration.

In a number of countries, such as Lesotho, the demographic effects of HIV/AIDS over time are truly dramatic. The decrease of the number of people within the most productive age groups projected over the next 20 years, as illustrated in figure 2, will result in a serious human capacity issue. However, since the capacity issue is already predictable, there is no reason to delay the responses so urgently needed.

The loss of people from the most productive age brackets creates a vicious cycle, eroding human and institutional capacities and rolling back economic and social development. On the level of individuals and families, the effects can be extreme.

Families and their capacity to fend for themselves are affected. When one or both parents suffer from AIDS or die as a consequence of the epidemic, children, especially girls, often have to leave school in order to participate in the family's income generation. There are cases, where owing to social norms and values that devalue women's rights and gender equality, women who are HIV-positive not only run the risk of death, but also the risk of social isolation. Deteriorating social conditions in affected families hold the potential to cause community safety nets to break down, because many households require assistance to meet their food, cash, care and labour needs. There is a devastating overload on the demand side.

Figure 2 | **Population size and age structure with and without AIDS, Lesotho, 2000 and 2025**



Source: United Nations, 2005. *World Population Prospects: The 2004 Revision*, CD-ROM (ST/ESA/SER.A/243).

Note: Unshaded bars represent the hypothetical size of the population in the absence of AIDS. Shaded bars represent the actual estimated and projected population.

In Zambia, studies of AIDS-affected households — most of them already poor — found monthly income fell by 66 to 80% due to coping with AIDS-related illness.

UNAIDS, 2004

The disease seriously affects production and productivity. In rural areas, agricultural output will decline, and the affected families will find it harder to make ends meet, impeding food security. For countries, the consequences will be that food production will decline, and they might become dependent on imported foods, imposing upon themselves a debt cycle through their need to survive.

3.2 | HIV and poverty—a bi-directional relationship

MDG 1 aims to eradicate extreme poverty and hunger by 2015. HIV/AIDS has a bi-directional relationship with poverty. In other words, the epidemic is both a cause and a consequence of poverty. Evidence from developing countries indicates that while the rates of infection were highest among urban, relatively well-educated people during the early stage of the disease, the spread of the epidemic later occurs among the poor, often rural, populations. Evidence suggests that once the epidemic is generalised, decline in prevalence rates is faster among the wealthier and better-educated strata. For the poor, prevalence rates continue to rise inexorably.

The effect of poverty on the spread of HIV is exacerbated by inequality, where large social and income disparities are at play. One common observation in the literature is that poverty and inequality make a society more vulnerable to HIV. This is all the more true in conditions of gender inequality, as women are not only biologically more vulnerable to HIV/AIDS, but also, owing to diminished economic and productive capacities, they are unable to extricate themselves from the poverty web.

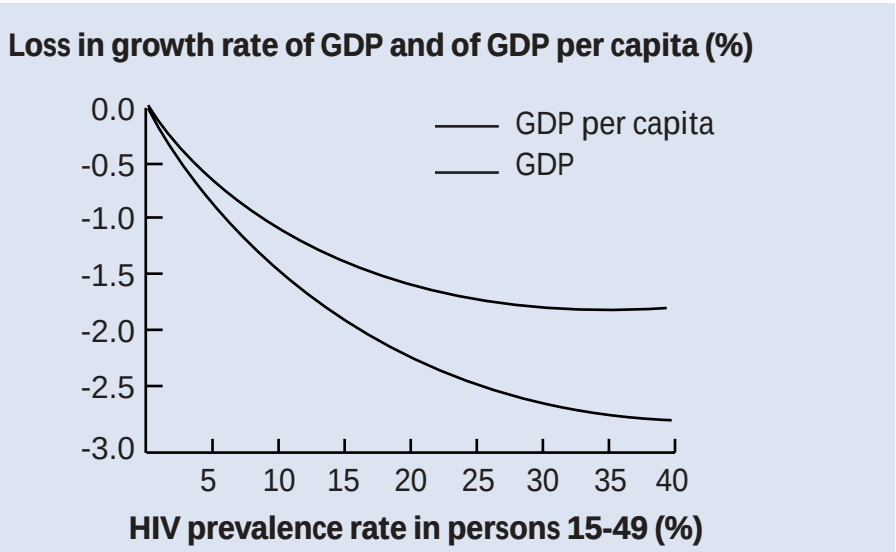
The Government of Lesotho has publicly recognised that the synergy between HIV/AIDS and poverty makes achieving the MDGs a particularly challenging task (Lesotho Country Review, 2005), and has made addressing the challenge of HIV/AIDS a priority.

3.3 HIV/AIDS, capacity, and macro economy

The macroeconomic impact of the loss of human capital will seriously affect economic development. For countries such as Lesotho and Namibia, it is estimated that HIV/AIDS will curb annual economic growth by some one and a half percentage points. However, these estimates are made on the assumption of a surplus of manual labour. The validity of this assumption has been seriously questioned, and consensus is emerging that this is no longer valid (Cohen, 2002). There is a growing consensus that the long-term negative effect of HIV/AIDS on economic growth in the most affected countries will be at an even higher level than the estimates mentioned above.

The macroeconomic impact of the loss of human capital will seriously affect economic development.

Figure 3A | **The correlation between HIV prevalence and loss in GDP and GDP per capita as estimated by ILO**



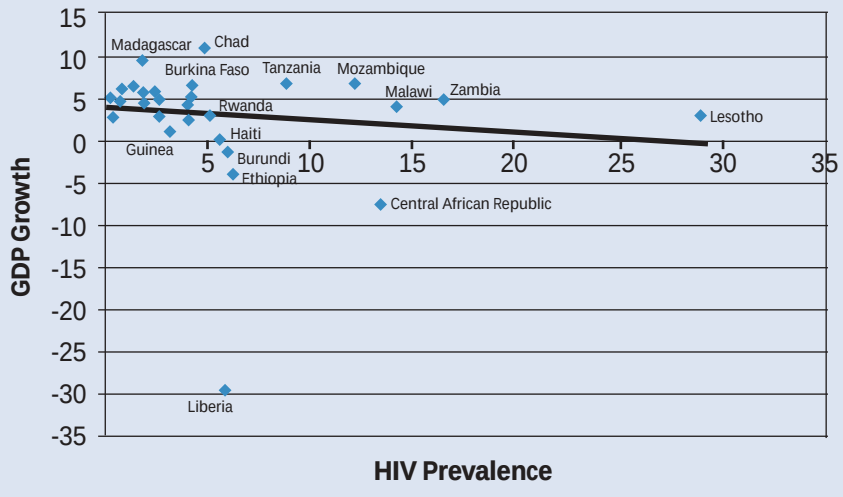
Source: *HIV/AIDS and work: global estimates, impact and responses,* ILO, 2004

More recent work by ILO estimates that the loss in GDP growth rate with an HIV prevalence rate of 30 % is approximately 2.5 percentage points, and the loss in GDP per capita is approximately 1.6 percentage points.

A 1.6% percentage points decrease of the GDP per capita might sound relatively moderate. However, the long-term consequences are significant. The GDP loss over a ten-year period could equal a loss of 28%, and with regard to GDP per capita; the loss will be approximately 17%. As an example, in 2002 Lesotho had a GDP of 714.4 million USD and a GNI per capita of 550 USD (World Bank, 2005). In ten years, the country's GDP would be USD 200 million lower than it would have been without AIDS, and the country's GNI per capacity would be 94 USD lower. These figures constitute significant amounts, which could have generated important differences in the lives of the people of Lesotho.

Analysing the situation in LDCs specifically, the data available covering GDP growth and HIV prevalence in 32 LDCs shows the negative causality between HIV prevalence and GDP growth. This, of course, has serious consequences for poverty eradication, health, and education. It also confirms the scale of the causality indicating that GDP growth will decline as HIV prevalence increases, indicating that increases in HIV prevalence dramatically will limit GDP growth. If such an estimate factored in women's productive labour as caregivers and providers for the family, the projection would be even more devastating than it appears.

Figure 3B | HIV Prevalence & GDP Growth 2003



Sources: *UNDP Human Development Report 2004* and *World Bank Country Data Profiles*

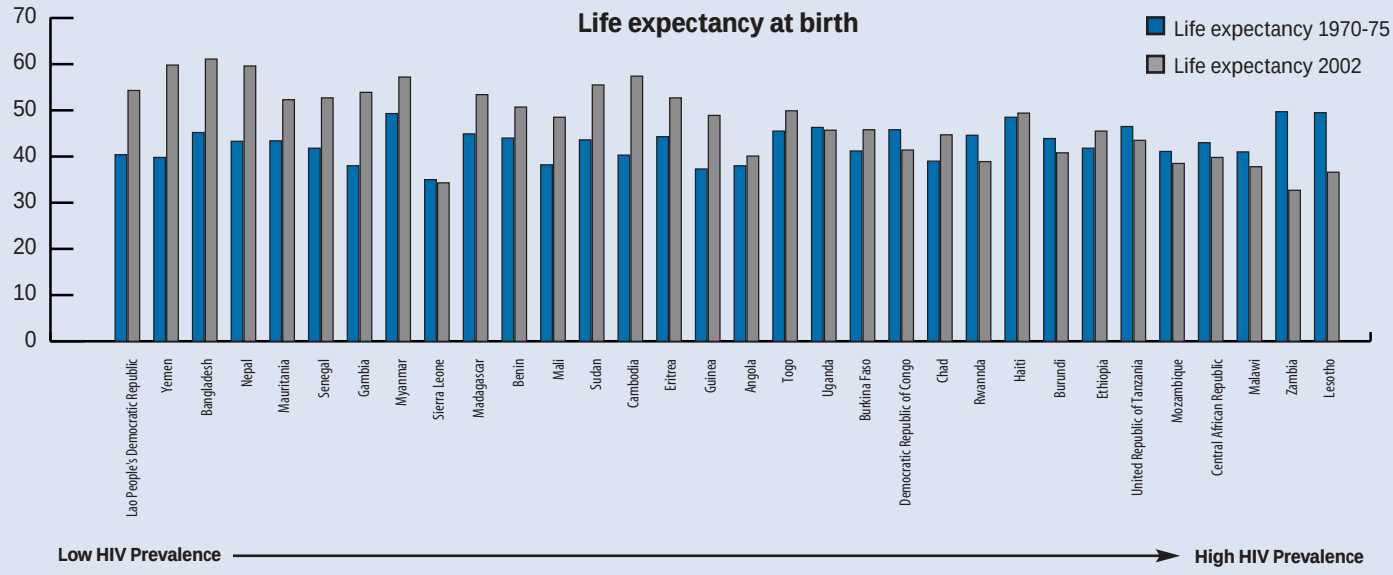
4 Mitigating skills loss, productivity, and poverty

As stated in the BPoA, the goals set out at the Second United Nations Conference on LDCs (1990) have not been reached. LDCs as a whole remain marginalized in the world economy. They continue to suffer from extreme poverty, and their progress has been undermined by lack of sufficient human and institutional capacity. They are further characterised by high indebtedness, low levels of domestic and foreign investments, declining flows of official development assistance, severe structural handicaps, falling or volatile commodity prices, HIV/AIDS epidemic, and, for some, violent conflicts or post-conflict situations.

Low levels of human and institutional capacities have been identified as key problems for LDCs, frustrating their development efforts. In this context, many LDCs now face the additional challenge of seeing their human and institutional capacities further eroded by the spread of HIV/AIDS. Consequently, small increases or, as in the case of HIV/AIDS, little decreases in the human capital can have a significant impact on the capacities of institutions, business, and civil society. In fact, if the loss of educated people exceeds a critical minimum, as Cambodia's post-Khmer Rouge experience has shown, even the concept of the institutions that they staffed (universities, schools, hospitals, law courts, the civil service and so on) is lost and becomes difficult to re-establish (Lisk, 2002).

Moreover, even if the decline in human resources is relatively modest, the combination of HIV/AIDS and relatively limited human resource development might cause the base of human capital to remain below a threshold that renders marginal growth in human capital relatively ineffective in producing growth. Furthermore, the combination of such a threshold, adverse economic structures, and low organisational and institutional capacities could perpetuate a poverty trap (Hamoudi & Birdsall, 2002).

Figure 4 | **Life expectancy at birth in selected LDCs in 1970–75 and 2000–05**



Source: *UNDP Human Development Report 2004*

The impact of the epidemic on life expectancy and consequently on human capital is illustrated by figure 4, which highlights the development in life expectancies in a number of selected LDCs.

Among the countries with high HIV/AIDS prevalence rates, life expectancy at birth has decreased tremendously as illustrated by figure 4.

4.1 HIV, the labour force, and productivity

Increasing the quality of human capital has been a major objective of developing countries and the international community, precisely because of the assumed positive causal relation to social and economic development. Achieving this objective has absorbed large quantities of both public and private resources, national as well as international. It follows that the erosion of human capital due to AIDS has not only personal costs for those affected, but also significant social costs in terms of lost output due to morbidity and the premature mortality of those who have been educated and trained (Cohen, 2002).

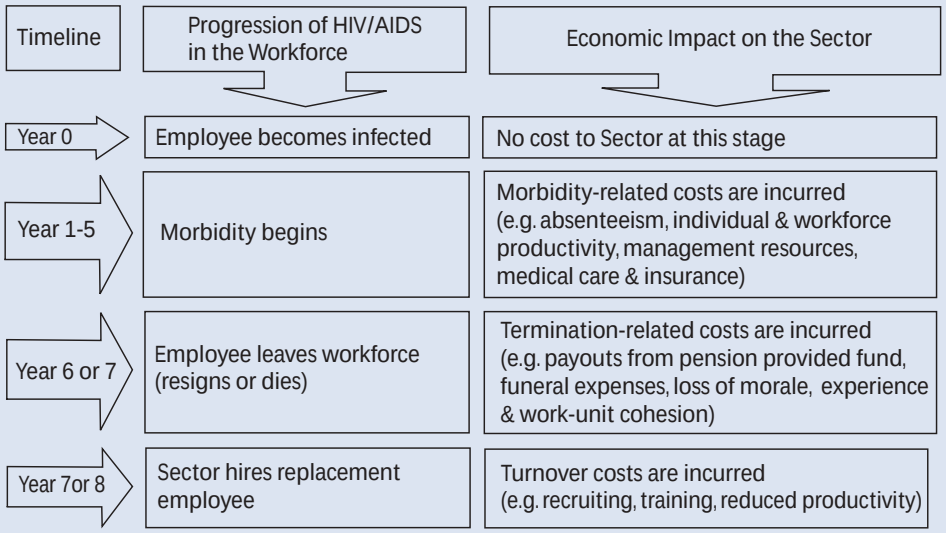
All countries with a generalised epidemic face capacity erosion by HIV/AIDS. However, as argued earlier, LDCs are much more vulnerable to erosion of their human and institutional capacities than other countries. Furthermore, in comparison to other developing countries, LDCs face the additional difficulty that limited human resources in terms of skills and competencies affect their capacity to address the epidemic in addition to other unforeseen challenges.

As noted earlier, evidence from developing countries indicates that while the rates of infection are highest among urban, relatively well-educated people during the early stages of the epidemic, at the generalised stage the spread of the disease mainly occurs among the poor and often rural populations. When the epidemic spreads in a country it almost strategically starts by targeting skilled, professional, and managerial labour before it spreads to the broader population.

The effects can be dire. In some cases it is anticipated that the level of human capital within individual institutions such as agricultural extension units and health institutions will fall to a level where they cease to exist as functional entities.

The progressive impact of HIV/AIDS on costs in a sector is illustrated in figure 5:

Figure 5 | The Socio-Economic Impact of HIV-AIDS



Source: *Africa: The Socio-Economic Impact of HIV/AIDS*, CHGA-UNECA.

When the epidemic spreads in a country it almost strategically starts by targeting skilled, professional, and managerial labour before it spreads to the broader population.

As mentioned earlier, it is assumed that in developing countries there is an endless supply of unskilled labour. However, there is increasing consensus that unskilled labour cannot be replaced without costs. In fact, some research indicates that so-called unskilled labour has accumulated location and task specific skills that can be difficult and costly to replace. An obvious example is agricultural skills, where local knowledge is of profound importance. An additional constraint facing family-based producers, such as most farmers in LDCs, is that being family-based, they face critical limitations in replacing labour lost to HIV/AIDS.

4.2 HIV/AIDS and the transfer of knowledge

HIV/AIDS increases poverty and vulnerability and hampers the generation of future human capacity. The epidemic not only affects the supply of human capital but also the flow of knowledge and skills. The most direct effect is through the loss of staff with training and educational functions, limiting the capacity to meet training demands. Additionally, informal on-the-job training often includes learning from older and more experienced colleagues, who now might fall sick or die due to the epidemic. This significantly limits the transfer of knowledge (Cohen, 2002).

The epidemic affects the value of education through a number of interlinked processes affecting human and institutional capacities at large. In cases where the epidemic takes a significant toll on national human capital, the loss of many educated people could reduce the social returns for skills among educated people who survive, to the extent that there are positive externalities associated with a larger total stock of human capital. This could result in a smaller contribution of education to aggregate growth. The loss of physical capital assets (due to economic decline) is also likely to reduce the ability of educated people to contribute to overall economic production, to the extent that physical capital and human capital are complementary inputs (Hamoudi & Birdsall, 2002).

The impact of HIV/AIDS on agricultural production is extremely important for national economies, as well as for the livelihoods of millions of families across LDCs.

4.3 Impact on agriculture, food security, and environment

LDCs are generally characterized by low levels of economic growth. They often have predominantly rural populations, and poverty is widespread. The impact of HIV/AIDS on agricultural production is extremely important for national economies, as well as for the livelihoods of millions of families across LDCs. In Africa alone agriculture accounts for 24% of the continent's GDP, 40% of its foreign exchange earning, and 70% of its employment. In fact, agriculture provides the main source of livelihood for up to 80% of the population in the countries worst affected by HIV/AIDS. For instance, in Uganda, agriculture remains the main source of livelihood for over 70% of the population (Uganda Country Review, 2005), and in Ethiopia 85% of the population is employed in agriculture (Ethiopia Country Review, 2005).

Agricultural production is affected by HIV/AIDS through a number of different channels. Agricultural extension and other government services aiming to increase productivity are already suffering from increased human capital losses and difficulties in finding replacement staff. For instance, UNAIDS reports that in eastern and southern Africa, a recent report examining AIDS and agriculture concluded that illness and death among government agricultural employees undermined governmental capacity to respond adequately to the epidemic. Some 16% of the staff in Malawi's Ministry of Agriculture

and Irrigation is HIV-positive. A UNDP report from 2003 reveals that in Zambia, in the public agricultural sector, mortality increased by more than 100% between 1990 and 1998 (UNDP, 2003). The erosion of human resources in agricultural extension and the consequent loss of productivity in agriculture are paralleled by a loss of farm workers and independent farmers.

The HIV epidemic disrupts Ministry of Agriculture (MoA) operations by severing key linkages in the delivery chain between MoAs and their clients; for instance, its impact on agricultural extension service. Further, in many rural areas, agricultural extension workers are the only contact farmers have with support services. When they fall sick or die, rural communities lose access to extension advice and services when they need them the most (UNAIDS & FAO, 2003).

FAO estimates AIDS will have claimed one-fifth or more of agricultural workers in most countries in Southern Africa by 2020. When one or two key crops must be planted and harvested at specific times, losing even a few workers can scuttle production. Households try to adapt by farming smaller plots of land, cutting back on weeding, repairing fences, and tending irrigation channels, or on livestock husbandry.

The environment is also negatively affected. Land is left fallow, subject to erosion and degradation, while untended livestock becomes vulnerable to disease, predators, and thieves. In a Ugandan study, almost half the respondents said AIDS-related labour shortages forced them to reduce the variety of crops they farmed.

FAO estimates AIDS will have claimed one-fifth or more of agri-cultural workers in most countries in Southern Africa by 2020.

"No crops have been planted in the last two years in Ana Nansubuga's 3-hectare plot in Masaka district in Southern Uganda. Nearby, three brick houses are closed up with boards. Ms. Nansubuga's eight children and their spouses are dead. Most had AIDS. Of 17 grandchildren, five have died of AIDS. Ms Nansubuga, 81 years old, looks after 11 children, aged 8 to 14. Relatives took the eldest away when he turned 28 and the land has lain idle since. The children are too young and she is too old to farm. Ugandan society is patrilineal: the wife moves in with her husband but does not inherit his land. So Ms. Nansubuga's late husband's family will not let her sell the plot. But, because of AIDS, they lack hands to farm it and the children are hungry."

AFRICA RECOVERY, VOL. 12, NO. 4, 1999
QUOTED IN UNAIDS & FAO, 2003

Table 1 | **Projected agricultural labour force loss due to HIV/AIDS in the most affected countries of Africa, 2000 and 2020.**

Country in Descending order of labour force loss in 2020	Projected agricultural labour force loss (%) by year 2000	2020
Namibia	3.0	26.0
Botswana	6.6	23.3
Zimbabwe	9.6	22.7
Mozambique	2.3	20.0
South Africa	3.9	19.9
Kenya	3.9	16.8
Malawi	5.8	13.8
Uganda	12.8	13.7
Tanzania	5.8	12.7
Central African Republic	6.3	12.6
Cote d'Ivoire	5.6	11.4
Cameroon	2.9	10.7

Source: *HIV/AIDS and work: global estimates, impact and responses, ILO, 2004.*

FAO estimates that countries where HIV prevalence reached 25%, had by 2000 lost more than 5 to 10% of the agricultural workforce, and projects that by 2020 the loss will approach 25%.

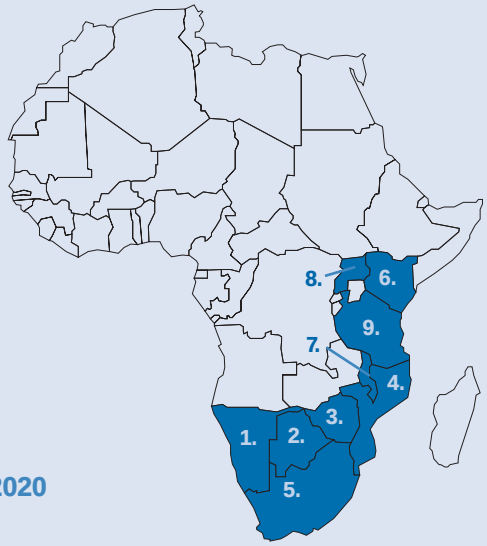
Declines in the agricultural workforce on the scale predicted by FAO will have significant effects on food production, especially in LDCs. LDCs will face this crisis in labour input without mechanisms to substitute labour with capital or technology, and the result will be a decline in agricultural production. Additionally, since food production is the key to farmers' survival, many families will try to cope with the loss of labour by reducing the labour input to cash crop production. The decline in cash crops will hurt the national economy and result in decreased abilities of farmers to generate savings to secure their families in hard times. At a later stage, families might even be forced to cut down on food production simply because they do not have the necessary labour input. Given the lack of financial reserves in LDCs and their dependency on domestically produced crops, this raises serious concerns with regard to the countries' future capacities to feed themselves and, consequently, the sustainability of their development process.

People are often referred to as "food secure" when they have regular access through production or purchasing power to sufficient food for a healthy and productive life. Food security initiatives address at least one of the following three components: food availability (when sufficient quantities of food are consistently available to all individuals within a country through household production, commercial imports, or food assistance); food access (when all members of a household have adequate resources to obtain appropriate food for nutritious diet); food utilization (the proper use of food

which relies on the knowledge within a household of food storage and processing techniques, principles of basic nutrition and proper child care [FANTA, 1999]). The scope of the problem of food insecurity can be illustrated by the case of Ethiopia, where at least 44% of the population is estimated to be food insecure (Ethiopia Country Review, 2005).

Figure 6 | Projected Loss in Agricultural Labour Forces

1. Namibia -26%
2. Botswana -23%
3. Zimbabwe -23%
4. Mozambique -20%
5. South Africa -20%
6. Kenya -17%
7. Malawi -14%
8. Uganda -14%
9. Tanzania, United Rep. -13%



Projected loss in agricultural labour force through AIDS in the nine hardest-hit African countries, 1985-2020

Source: FAO presentation delivered at UNGASS 2003

"Like all families, they deserve the best. But what kind of future can they expect if their community loses the battle with HIV/AIDS?"

SACI/UNDP

The vulnerability of women and girls to HIV is inextricably linked to poverty and exacerbated by food insecurity. However, food security, gender inequality, and HIV/AIDS have, at least in some countries, another aspect. It is reported that in Malawi, households that had lost females under 60 were twice as likely to experience food deficit as those in which men in the same age bracket had died (UNAIDS, 2004). The study further showed that in Uganda, women produce 75% of the food and account for 80% of the agricultural labour force. This means that any increase in AIDS among women in Uganda is a great threat to food security. Indeed the production of one staple crop, matooke, was severely affected by AIDS in the community. Consequently, paying special attention to the needs of women in agricultural settings can significantly contribute to addressing food insecurity in vulnerable families as well as the issue of gender inequality. This entails simultaneously pursuing two important goals.

The international community has already initiated a number of initiatives aiming to address the Triple Threat Crisis of food insecurity, weakened capacity for governance, and HIV/AIDS. One is the Southern Africa Capacity Initiative (SACI), which represents UNDP's direct contribution to the UN system's efforts to develop a strategy to respond to the interlocking challenges of HIV/AIDS, food insecurity, and governance.

4.4 The mining sector and HIV/AIDS

In addition to agriculture, mining is a key revenue earner in many LDCs. However, mining areas are often located far away from population centres and consequently are heavily dependent on migrant labour. In Myanmar, the STD clinic that has reported the highest HIV-prevalence was located in Myitkyina, which is the clinic closest to the country's jade mines (Science, Vol. 301, 2003). If HIV/AIDS continues to spread in Myanmar, the mining sector (jade and gemstones) will be one of the first places to face serious human resource constraints. The epidemic has not yet reached a level where mining is in serious jeopardy, but the progression of the disease is indicative of what is to come. In countries that had the same HIV prevalence rates 10 to 20 years ago as Myanmar has today, the epidemic has created serious capacity problems in the mining sector. In Zambia, for example, skilled workers have an average infection rate of more than 26% significantly adding to the operational costs of mining companies (UNAIDS, 2004).

In fact, workers in the mining sector in several countries exhibit high HIV-prevalence rates. Examples of countries where employees have higher sero-positive prevalence rates than the national average include Burkina Faso, Malawi, and Togo. The relatively high prevalence rates in mining areas have historical antecedents in male labour migration and the colonial policy that restricted mine labourers from bringing their spouses to the work area. The result was that many of the labourers began to consume large amounts of alcohol and rely on brothels for sexual services. This is the story in all countries that fell into the category of settlement colonies.

Workers in the mining sector in several countries exhibit high HIV-prevalence rates.

The seriousness of HIV/AIDS can be viewed against this background both in LDCs and other developing countries. In Botswana, the diamond-mining company Debswana carried out an institutional audit. It collected data on impact, including sick leave, retirement, and increasing health costs, training, recruitment, and the difficulty of replacing people necessary for the company's performance. It was found that, between 1996 and 1999, the percentage of retirements due to HIV/AIDS had almost doubled – from 40 to 75%. The mortality rate as a result of AIDS in the same period shot up from 37.5 to 59%. It was clear that the company would not survive without an effective AIDS strategy (UNAIDS, 2003).

Furthermore, artisanal mining is widely practiced in most of LDCs, adding further complications to the task of preventing the spread of HIV/AIDS among miners. Artisan miners share the same risks as miners employed by large corporations. However, artisanal miners do not share similiar facilities and social infrastructure as employed miners, which makes workplace-based prevention and health care possible. The scope of small scale and artisanal mining is quite significant in a number of LDCs. In Burkina Faso, an estimated 100,000 to 200,000 people work in this sector. The estimate for Malawi, is 40,000, for Mali, 200,000, for Mozambique, 60,000, for Tanzania, 550,000 and for Zambia 30,000 (*Breaking New Ground,* Report of the MMSD Project, 2002). When

addressing the mining sector and the special risks connected to migrant lifestyles, countries with significant small-scale mining operations should include these in their HIV/AIDS programmes.

One response that particularly serves miners and artisans in the industry is for mining companies to replace all-male hostels with accommodations for families in a bid to prevent HIV transmission and foster a more stable workforce. It is the hope that such initiatives can reduce the rate of HIV transmission significantly—possibly by as much as 40%.

4.5 Declining outputs in industry and the service sector

Results of a study in several African countries have shown that the combined impact of AIDS-related absenteeism, productivity decline, health expenditures, and recruitment and training expenses could cut profits by at least 6 to 8%. Comparative studies of East African businesses have shown that absenteeism due to HIV/AIDS can account for as much as 25 to 54% of company costs (UNAIDS, 2003).

ILO projects that, assuming the continued absence of treatment, by 2010, 17 countries (16 in Africa and Haiti), including many LDCs, will have lost more than 10% of their labour force. Five of them—Swaziland, Botswana, Lesotho, Zimbabwe and South Africa—will have lost more than 20%. In the case of Zimbabwe, it would be almost 33% (ILO, 2004). The epidemic also affects workforce quality, since younger, less experienced men and women replace AIDS-affected workers.

When addressing the mining sector and the special risks connected to migrant lifestyles, countries with significant small-scale mining operations should include these in their HIV/AIDS, programmes.

4.6 The informal sector

The formal sector has been an important employer in many LDCs. However, most of the jobs of the service sector are increasingly located within the informal sector. As a result, the informal sector is a key employer and constitutes a core element of the economy in most LDCs. This sector will in general face many of the same challenges as the formal sector, as well as specific challenges of its own. Many of the workers in the informal sector are women, mostly home-based workers, whose labour is exploited and appropriated by middlemen and contractors.

Falling wages and rising costs of living have swollen the numbers of formal sector workers who engage in informal activities on the side. Informal workers are especially likely to suffer from the consequences of HIV/AIDS: first, because there are often no health facilities or social protection arrangements at their workplaces; second, because their activities are rarely based on or lead to financial security; third, because of the transient and vulnerable nature of the work situation itself; and fourth, because it is difficult to mobilise and unionise within the informal sector.

4.7 Responses to the erosion of human capacity

Recognising the seriousness of the capacity challenge created by the AIDS epidemic, it is clear that strategies mitigating the impact of HIV/AIDS on the human capital of LDCs are urgently needed if service delivery is to be maintained. The available strategies include prevention, treatment, and impact mitigation. LDCs will have to apply these to their fullest in order to curb the impact of the epidemic on human and institutional capacities. The strategies will need to be applied in highly efficient and mutually reinforcing ways. Actions that can mitigate the impact of HIV/AIDS include increased effort to protect existing human capacities. These include actions to prevent the spread of the virus, and actions towards prolonging the productive life of people living with HIV/AIDS. This means promoting treatment, including antiretroviral (ARV) therapy programmes.

> **"A study of female traders in Owino market in Uganda shows how quickly they can lose their livelihoods: when the women's work is interrupted, either through their own illness or the need to care for someone else, spoilage of perishable stock quickly occurs, their small financial reserves are rapidly depleted, they forfeit their stalls, and their business collapse. Furthermore, it was observed in the same study that many of the women ruined in this way turned to the sale or bartering of sexual services in the hope of regaining some kind of financial security, thereby increasing their vulnerability to HIV infection."**
>
> LISK, 2002

Recognising the seriousness of the capacity challenge created by the AIDS epidemic, it is clear that strategies mitigating the impact of HIV/AIDS on the human capital of LDCs are urgently needed if service delivery is to be maintained.

Policies need to be implemented to scale up education efforts in order for LDCs to replace the human capital lost and hopefully increase the human capital available to drive the development process forward. The policies should promote actions increasing capacity development, such as on-the-job training as well as increased formalised education. An example of such future-oriented action is that some enterprises have already understood the human capacity challenge and are now training two staff members for each position in order to be able to continue production undisrupted when staff members fall ill with AIDS.

Addressing the issue of migrant workers and their increased vulnerability to HIV infection, it is expected that programmes that allow migrant workers to be accompanied by their families will significantly curb the problems. Research in mining areas in Africa shows that migrant mine workers are two and a half times more likely to be HIV-positive than workers who live with their families. Thus, policies that allow migrant

workers to move with their families can limit the spread of the virus and reduce the impact of HIV.

Supporting workplace prevention programmes for employees and management must become a priority, and so should providing health care in workplace settings and endorsing policies of non-discrimination. The ILO Code of Practice on HIV/AIDS and the World of Work is a framework for action that can be used to establish policy development principles and provide practical programming guidance.

Acknowledging the importance of the informal sector to most LDCs, it is imperative that policies are developed to scale up prevention and treatment programmes and to mitigate the wider social and economic impact of the epidemic.

Paying special attention to the needs of women in agricultural settings can significantly limit food insecurity and prevent food shortages in vulnerable families, at the same time addressing gender inequalities.

Through such forward-looking actions, countries will be able to limit the scope and effect of the emerging human and institutional capacity crises.

Policies need to be implemented to scale up education efforts in order for LDCs to replace the human capital lost and hopefully increase the human capital available to drive the development process forward.

Box 3

Policies in Place in LDCs to Address Capacity Challenges

(Country Reviews, 2005, Ethiopia, Lesotho, Nepal, Uganda)

- *Ethiopia*—Pressure for the development and implementation of a National HIV/AIDS strategy yielded fruits in 1998, leading to the formulation of the national response strategic framework a year later. Success was below expectations for this multisectoral approach, but the establishment of the HIV/AIDS Control and Prevention Office in 2002 was a step designed to scale up performance. A human resources policy is being drafted as part of a holistic approach to capacity building.
- *Lesotho*—Lesotho's fragile political system received a boost from the introduction of the Mixed Member Proportional Representation (MMPR) model of elections in 2002, the brainchild of the 1999 Interim Political Authority (IPA). Through the efforts of IPA, the Independent Electoral Commission (IEC) was restructured, and parliamentary seats were increased from 80 to 120. This has brought with it political stability and greater ability to address capacity issues. The government of Lesotho has also adopted the WHO "3 by 5" strategy to ensure provision of ARV therapy to 30,000 AIDS patients by the year 2005.
- *Nepal*—Decentralization and local empowerment have been applied to managing health facilities in a participatory, accountable, and transparent way, with effective support from the Ministry of Health and its sector partners. Within a nine- to ten-month period in 2004, 1300 sub-health posts, sub-health centers, and primary health centers have become managed by community systems.
- *Uganda*—The policy of placing the Uganda AIDS commission (UAC) directly under the Office of the President and having the President chair the first meetings made the UAC an inter-ministerial agency that required cooperation from many government ministries. It also sent a message that AIDS was an important concern of the president. This top-down policy of making prevention an important national concern welded with grass-roots efforts, such as social pressure from women's groups, resulted in a collaboration that mobilized many sectors of society in prevention of HIV/AIDS through behavioral change.

5 Gender Inequality: A Critical Dimension of Capacity and HIV/AIDS

"Women now account for nearly half of all adult infections. In sub-Saharan Africa, that figure is around 58%. Among people younger than 24, girls and young women make up nearly two thirds of those living with HIV. And yet, one third of all countries still have no policies to ensure that women have access to prevention and care. Knowing what we do today about the path of the epidemic, how can we allow that to be the case?"

SECRETARY-GENERAL KOFI ANNAN AT THE XV INTERNATIONAL AIDS CONFERENCE, BANGKOK, 11 JULY 2004.

There is growing evidence that gender inequality is one of the key drivers of the spread of HIV/AIDS. Women are affected by HIV/AIDS in at least three different ways that reinforce each other. Women and girls experience the direct effects of the epidemic as people living with HIV/AIDS. They provide care and treatment to family members living with AIDS—the so-called care economy. Women also endure some of the epidemic's worst effects when they become the heads of single parent households in which they have sole responsibility for securing the survival of their families. In this difficult situation, as a result of discrimination, poverty, and inequality, women face enormous challenges. The Chinese proverb "Women hold up half the sky" gives a true reflection of women living in these conditions. In LDCs, practices and legislation that do not adequately protect women's interests or their human rights are still widespread, and in most cases insufficient attention has been paid to effecting change.

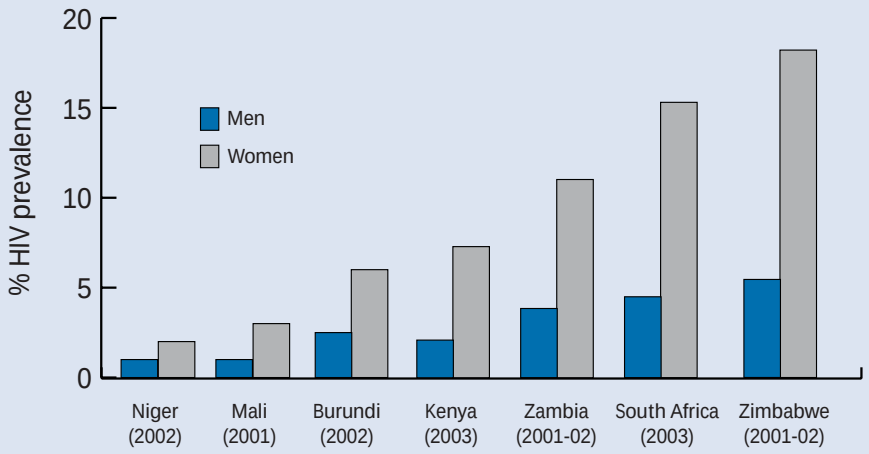
5.1 Increasing burden of HIV/AIDS on women

Infection rates of women and girls are on the increase. The overall proportion of HIV-positive women has steadily grown. In 1997 women were 41% of people living with HIV. In 2004, the figure had risen to almost 50% (UNAIDS, 2004). This development is especially clear in sub-Saharan Africa, where 58% of HIV-positive adults are women, and

75% of HIV-positive young people are women and girls. This development is driven by a number of social and structural factors, which tend to put women, especially younger women, in a significantly more vulnerable position than their male peers.

Women's vulnerability to HIV/AIDS is exacerbated as a result of diminished capabilities that are inherently structural and imbedded in traditional gender relations. The fact that girls generally do not start out in life with the same advantages as boys for developing their knowledge and skills through access to opportunities and education and are therefore unable to use those opportunities to enhance their capacities, increases their chances for failure later in life.

Figure 7 | **HIV Prevalence among 15 to 24 years old men and women in selected African countries**



Source: *2004 Report on the global AIDS epidemic,* UNAIDS, 2004.

The high HIV prevalence rate among young women include a tendency for older men who are more likely to be HIV-positive to target young girls.

The reasons for the high HIV prevalence rate among young women include a tendency for older men who are more likely to be HIV-positive to target young girls or virgins. In addition, gender inequalities make it much more difficult for women, especially young women, to negotiate condom use. Furthermore, sexual violence, which damages tissues and increases the risk of HIV transmission, is widespread in some societies. It escalates in the context of armed conflict.

In many countries, including several with high rates of HIV-infection, girls are married off in their teens. However, recent studies in Africa indicate that young married women are at a higher risk of HIV infection than their unmarried counterparts, even when the unmarried counterparts are sexually active.

In Ndola, Zambia, a study found that 27% of married girls were HIV-positive, whereas only 16% of their sexually active but unmarried peers were HIV-positive. Studies have also found that adolescent girls who were married to much older men—unfortunately a common occurrence—were more likely to be HIV-positive.

UNAIDS, 2004

The increased impact the epidemic has on women is becoming a serious social issue that urgently needs attention. Additionally, it is developing into a serious capacity challenge, affecting food production, health care, education, and other key sectors of society that urgently call for gender sensitive responses to the epidemic. Especially with regard to food production, women in Africa tend to be responsible not only for household duties and child care but also for most principal tasks in subsistence farming, including levelling, weeding, harvesting minor crops, and transporting produce. They produce between 60 and 80% of the continent's food (Lisk, 2002).

There are two ways of caring for people living with AIDS: hospital-based care and home-based care. In many LDCs, hospital-based care is often not available to all, especially in rural areas and home-based care is often the only viable solution for the sick. However, since home-based care primarily relies on the work of women, it has gender implications that are often overlooked. Nevertheless, home-based care is often the only option and it has a number of critical advantages, it is affordable and can, if paired with medical extension services, provide high quality care.

Paying special attention to the needs of women will significantly benefit the next generation and thus secure future human capacity.

Responding to the needs of children, a number of reports have reconized that families who lose their female breadwinner are much more likely to break up and leave the children to fend for themselves than families who lose their male breadwinner. Paying special attention to the needs of women will significantly benefit the next generation and thus secure future human capacity.

5.2 Protecting the human rights of women

AIDS is not a gender-neutral disease. Marked gender differences in household responses are apparent, with the burden of responsibility for care usually falling on women, and with women with HIV/AIDS being treated more negatively by household members than men (de Vylder, 2001).

In response to declining income, families often resort to taking children, especially girls, out of school. As an example, in Lesotho, girls' school enrolment has declined by at least 25%, which has been attributed to HIV/AIDS and the interconnected food crisis (Lesotho Country Review, 2005). Addressing such gender disparities will significantly

improve the social and economic situation of women. Further, less educated girls and young women are less able to protect themselves against becoming HIV-positive, fuelling a vicious cycle. Also, in the absence of education and skills to enter the formal sector, girls and women may engage in high-risk behaviours as survival strategies, leaving them more vulnerable to the disease. Without the education and skills they need to enter the formal sector, they are also more vulnerable to sexual abuse and exploitation.

HIV/AIDS, however, is not the only reason families take their girls out of school. A number of studies have documented that a major contributing cause is escalating school fees, which AIDS-affected families often are unable to pay. Further, increasing fears, especially for girls, about exposure to HIV in schools may reduce demands for secondary schooling (Hamoudi & Birdsall, 2002).

Other serious social effects occur when partners or fathers of women die of AIDS. In many cases, women are left without inheritances such as land, housing, or other assets. UNICEF reports that in a Ugandan survey, one in four widows reported that their property was seized after their partner died (UNAIDS, 2004). Similarly, an FAO study in Namibia found that 44% of widows lost cattle, 28% lost small livestock, and 41% lost farm equipment in disputes with in-laws after the death of a husband (UNAIDS, December 2004). A woman may also be prevented from using her property or inheritance for her family's benefit, which in turn hurts her ability to qualify for loans or agricultural grants. In fact, access to productive resources such as land, credit, knowledge and skills, training, and technology is still denied to women. Women are typically discriminated against in access to resources. Furthermore, denying women and girls these basic human rights increases their overall vulnerability, including the risk of sexual exploitation, abuse, and HIV.

In the absence of education and skills to enter the formal sector, girls and women may engage in high-risk behaviours as survival strategies, leaving them more vulnerable to the disease.

"There are now a growing number of cases where in-laws deliberately delay the settlement of the estate of property distribution when there is an inheritance because they believe that the widow, being HIV-positive herself, will die soon, as may her orphan children. For many in-laws, HIV-positive widows are people who are almost dead, who do not deserve even the slightest human rights and dignity."

IZUMI, 2004

In Zambia, the Victim Support Unit (VSU) was formed in 1994 through the police reform programme. Its objective is to focus on gender violence by prosecuting perpetrators and creating awareness. Responding to property grabbing, a major problem in Zambia, the police, through VSU, are empowered to recover property and make arrests. Remaining problems include the reluctance of widows to go to the police, and lack of information about land laws and the VSU. Furthermore, some widows do not want to risk breaking family ties.

IZUMI, 2004

5.3 Responding to the challenge of gender inequality and capacity

Since women and girls bear the brunt of the burden of the epidemic, it is crucial to address this fundamental aspect of the crisis. Important actions would include initiatives addressing gender inequality in education, since less educated girls and young women are less able to protect themselves against HIV. One possible policy option is to abolish school fees for affected families or, better yet, for all. This action has proven that it provides considerable mitigation, improving the chances of children, especially girls from AIDS-affected families, to remain in school.

Important actions would include initiatives addressing gender inequality in education, since less educated girls and young women are less able to protect themselves against HIV. One possible policy option is to abolish school fees for affected families or, better yet, for all.

Other actions with proven effect on girls' enrolment include: reducing the distance to schools (all children will benefit from this, but the risks connected to long distances are often higher for girls); providing water and sanitation at schools, including separate toilets; increasing the number of female teachers; and making schools girl-friendly (for instance by allowing married and pregnant girls to continue in school) (World Bank, 2005).

Furthermore, securing the human rights of women, including the right to inherit family property, is also an action that will clearly benefit women as well as children in affected societies. The issue of violence against women also merits attention. Men may become threatened and feel challenged by the poverty that renders them helpless to fulfil the role of the breadwinner of the family. Violence against women is sometimes used as a tool to assert masculinity. Boys who are brought up in such abusive relationships tend to repeat the same violent behaviour as their fathers later on in life, perpetuating a cycle of degrading women that reinforces other violations of their human rights.

Individuals can take formidable action. For example, Ms. Catherine Phiri from Malawi proved that individuals can make a difference by supporting the development of a nation's human and institutional capacities. She founded the Salima HIV/AIDS Support

Organization (SASO), which runs information programmes in communities and schools, promotes and distributes condoms, and mobilizes voluntary support and home-based care for AIDS patients (UNDP, *HOPE: Building Capacity; Least Developed Countries Meet the HIV/AIDS Challenge, 2004*).

Finally, through innovative efforts, the care burden can be redistributed more evenly between men and women. It is important to keep gender equity and gender equality as core goals for interventions providing assistance to AIDS-affected families. Further, paying special attention to the needs of women, who as single parents have proven to be better at keeping families together, will significantly benefit the next generation and thus help secure future human capacity.

6 Addressing Households and Community Capacity

Households affected by AIDS face a number of difficult challenges. Expenses increase when households have to care for a person living with AIDS. There will be payments for medicine; relatives will have to take time to provide care; and ultimately they must meet the expenses of a funeral. Farmers and other family businesses face increased costs of labour either in the form of salaries to newly hired replacement labour or as an opportunity cost when activities are scaled back.

Increased expenditures are paralleled by a decrease in income. Depending on who is falling sick, households will have to cope with different degrees of decline in either cash income or labour supply. In the 1990s, a comparative study reported by UNAIDS tracked 300 AIDS-affected households in Burundi, Cote d'Ivoire, and Haiti, two of which are LDCs. The study found a steady decline in the number of economically active members per household, which was usually followed by a drop in per capita household consumption. In other countries such as Zambia, studies have documented that monthly income in AIDS-affected families fell by 66 to 80% when households had to cope with opportunistic infections and illnesses emerging from the epidemic.

In most LDCs 90% of AIDS care is provided at home. This places extraordinary strains on women who will have to care for the sick while caring for children and producing income or food crops.

The combined loss of income and increase in expenditures will often result in negative savings, leaving the family increasingly vulnerable to other unforeseen shocks. The household responses to this challenge often differ between urban and rural settings. In urban settings, households often resort to informal borrowing and using their savings. Rural households tend to sell assets, migrate, or rely on child labour.

A commonly used strategy is to take young family members out of school. As noted, the

tendency to take girls out of school is greater than the tendency to take boys out. Consequently, the HIV/AIDS epidemic tends to aggravate already existing gender disparities.

6.1 Orphans and the impact on future human capacity

The HIV/AIDS epidemic is taking its toll on the populations of many LDCs, especially in sub-Saharan Africa. The number of AIDS orphans is growing rapidly, and the situation needs urgent attention in order to protect these children in a world where they, to a large extent, will be fending for themselves. As can be seen in figure 8, the number of AIDS orphans has already reached an alarming number. The predictions for the future are that the number will grow to almost 40 million orphans by the year 2010.

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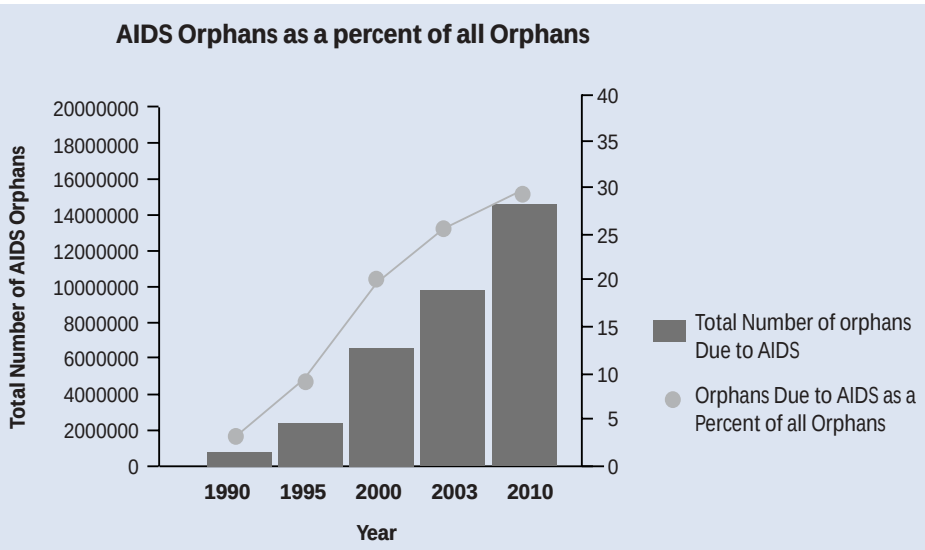
Figure 8 | **Estimated number of AIDS orphans in sub-Saharan Africa 1990–2010.**



Source: *Children on the Brink 2004: A Joint Report of New Orphans and a Framework for Action, UNAIDS, UNICEF & USAID, 2004.*

The aggregate data are staggering. However, they barely indicate the scope of the challenge to the individual countries. In Uganda, AIDS has orphaned about 2 million children, and there is a growing number of child-headed households (Uganda Country Study, 2005). Similarly, it is estimated that in Lesotho as a result of AIDS, there are now more than a 100,000 orphans (Lesotho Country Review, 2005).

Unfortunately, there is clear evidence that orphaned children run a very high risk of being taken out of school, temporarily as well as permanently, to meet care and labour demands within households. As noted above, this likelihood is even higher for girls. It is estimated that in countries with high HIV prevalence, 30 to 40 % of all children will be orphans by 2010. Consequently, it will be hard to overestimate the impact of lack of

school attendance on future human and institutional capacities of the countries concerned. If the countries fail to secure the transfer of knowledge and know-how to vast numbers of HIV/AIDS and other orphans, their human and institutional capacity will decline, seriously limiting their potential for development.

The pressures on households affected by HIV/AIDS are immense. Their reactions have implications for intergenerational transmission of poverty through effects on the future labour force. A long-term reduction in the quality of the labour force, and thus on economic growth and employment, works against policies for poverty reduction and increased social protection (ILO, 2004).

Furthermore when poverty increases and social protection declines, the most vulnerable, especially children, are forced into the labour market where they become exposed to a number of additional threats. Recent ILO-sponsored surveys in Tanzania, South Africa, Zambia, and Zimbabwe confirmed the linkage between HIV/AIDS orphanhood and a likelihood that a child would work, frequently outside the household, in conditions that are sexually and economically exploitative and prone to harassment and violence (UNECA, *The Impact of HIV/AIDS on Families and Communities in Africa).*

6.2 Households can cope with capacity challenges

Despite the seriousness of the economic effects of HIV/AIDS on households, it is possible to limit the negative effects on children's school attendance. A number of studies have shown that a major factor contributing to AIDS-affected families' choice to take their children out of school is that they can no longer afford school fees. Consequently, eliminating school fees is an action that will significantly improve the chances of children belonging to AIDS-affected families continuing in school.

It is essential to mitigate the social and economic impact on the affected households, especially in LDCs, where safety nets are rare and social protection measures are limited. It is crucial to ensure that orphaned and other vulnerable children, including

It is essential to mitigate the social and economic impact on the affected households, especially in LDCs, where safety nets are rare and social protection measures are limited.

In Cambodia, a recent study by the Khmer HIV/AIDS NGO Alliance and Family Health International found that an estimated one in five children in AIDS-affected families reported they were forced to start working in the previous six months to support their family. One in three had to provide care and take on major household work. Many had to leave school, forego necessities such as food and clothes, or were sent away from their home.

UNAIDS, 2004

girls, can continue to attend school and that they are not left to fend for themselves. Families, and especially those taking care of orphaned children, need strategies such as community-based childcare and home visits. Responding to demand, community-based childcare centres are already becoming more common in a number of countries. Such centres can provide children with food and access to health care and enable children who have reached school age to attend school.

Similarly, strategies can be developed to ease the pressure of the care economy on households and to make it easier for women to cope with the increased burden. Support programmes must be developed, and national and macroeconomic policies need to be designed to mitigate the impact of the increased burden of care and income generation that the epidemic places on households—especially on their female members.

6.3 Protecting future human capacity

Orphanages, children's villages, or other group residential facilities immediately come to mind as a logical response to the crisis. However, key stakeholders strongly recommend alternative solutions for orphans and other vulnerable children. Instead, programmes that keep children in their communities are recommended.

Five key strategies integrated in a comprehensive framework are recommended. They are:

- Strengthen the capacity of families to protect and care for orphans and vulnerable children by prolonging the lives of parents and providing economic, psychosocial, and other support.
- Mobilize and support community-based responses to provide both immediate and long-term support for vulnerable households.
- Ensure access for orphans and vulnerable children to essential services, including education, health care, birth registration, and others.
- Ensure that governments protect the most vulnerable children through improved policy and legislation and by channelling resources to communities.
- Raise awareness at all levels through advocacy and social mobilization to create a supportive environment for children affected by HIV/AIDS (UNAIDS, UNICEF & USAID, 2004).

Implementing a comprehensive framework addressing the needs of orphans as suggested above demands resources. Many LDCs will need additional financial assistance to implement such programmes. The international community should respond positively to such requests as safeguarding vulnerable children is an investment in future human capital, which in the end will contribute to the national development process and achieving the MDGs.

7 Basic Service Delivery

The HIV/AIDS epidemic has a serious impact on the capacities of the affected countries to deliver public services. And compared to population size, most LDCs have a woefully low base of public employees delivering basic services (Dovlo, 2004 & Lewin & Stuart, 2003).

Losing key staff to the epidemic puts economic and human capacity strains on institutions, even when the loss can be replaced. Capturing the magnitude of the epidemic and its impact on economic growth and development is not an easy task especially as the lead-time between HIV infection and the onset of AIDS means that LDCs have yet to experience the full impact of the epidemic. While emergency measures can and should be taken, the long-term cost of attaining the ratio necessary for basic service delivery should be factored into macroeconomic policy planning, economic estimates, and national development plans.

Though no country has yet experienced the full effects of the HIV/AIDS-driven human capacity challenge, already there are cases where full replacement of lost staff seems to be rather unlikely—e.g. Lesotho, Malawi, and Zambia. In some cases the decline in public institutions' capacity to deliver services is reinforced by an increase in demand for the same services. In other cases, the fall in the supply is to some degree mitigated by a similar fall in the demand for a specific service. Specific sectors such as health, education, and transportation will be analysed in further detail.

7.1 Health sector responses

In the health sector, the negative impact of the HIV/AIDS epidemic on the staff and consequently on the supply of public services is radically amplified by a parallel increase in the demand for health services.

Regarding the supply side of how the epidemic affects the delivery of basic health services, the causal relationship is evident. Health sector cadres fall prey to the epidemic at a rate sometimes higher than the potential rate of replacement, and always at serious training costs to the health systems. This exhausts the sector of its human resources. In some countries, the epidemic is so widespread that the toll it will take on national human capital will cause a serious decline in the capacities of institutions to function, even when a decrease in the quality of services delivered is accepted as a crisis management strategy. Not only is this a factor in the formal healthcare systems; the traditional/herbalist side is also severely affected with a consequent threat to indigenous health and knowledge systems.

In African countries, 34 of which are LDCs, studies estimate AIDS causes between 19% and 53% of all government health employee deaths. For example, Malawi and Zambia have experienced five- to six-fold increases in health worker illness and death rates. In fact, the epidemic is quickly outstripping growth in the supply of health-sector workers.

UNAIDS, 2004

Only 7% of those in need of ARV therapy in the developing world are receiving it. In sub-Saharan Africa, ARV treatment only reaches 2% of those in need.

The consequences are evident: the supply and quality of health services will decline as health sector staff falls ill or dies from AIDS. Unfortunately, the epidemic is also responsible for an equally serious increase in the demand for health services. People with AIDS become seriously ill from AIDS, as well as from a wide range of opportunistic infections. This significantly increases the demand for health services.

Almost 40 million people are HIV-positive, and almost 30 million of these live in sub-Saharan Africa. Only 7% of those in need of ARV therapy in the developing world are receiving it. In sub-Saharan Africa, ARV treatment only reaches 2% of those in need. Consequently, in the highest prevalence countries, only urgent expansion of treatment will forestall continued catastrophic rates of illness and death and the attendant social and economic devastation.

Despite this rather dire news, there are signs of positive developments. After years of delay, a growing number of governments, donors, and international organisations are committed to rapidly scaling up treatment, including ARV. One example is the joint WHO/UNAIDS programme to provide ARV therapy to 3 million people by 2005 (the "3 by 5" initiative).

However, for LDCs to be able to bring ARV treatment to all who need it, including many health sector staff members, it is crucial to strengthen health systems and to recruit and train many new health workers. Critical prevention measures, including the treatment of sexually transmitted infections and ensuring safe injection, also depend on functioning health systems. The number of health workers needed to cover the entire population of

a specific country is not a fixed number, and some systems perform better than others with regard to effectiveness and efficiency. However, an empirical research indicates that 2.5 health workers per 1000 population is a suggested guideline (JLI, 2004).

In Malawi, the National AIDS Control Programme reports that over 70% of bed occupancy in public hospitals in Malawi is considered HIV/AIDS-related.

UNDP Malawi, 2002

The Ministry of Health in Lesotho estimates that 50% of patients in hospitals, and one in four outpatients, have HIV/AIDS-related conditions. Further, the country's leading hospital has reported that 80% of all admitted patients are HIV-positive.

Turning a Crisis into an Opportunity, 2004

Given the increase in demand on already overstretched health systems, with overworked and underpaid health workers, it is clear that many LDCs face the possibility that their health systems will not only be overstretched, but may totally break down. Further, if the financial needs of the health sector are not met, including the needs of employees, it is likely that some countries will experience significant reactions from health workers.

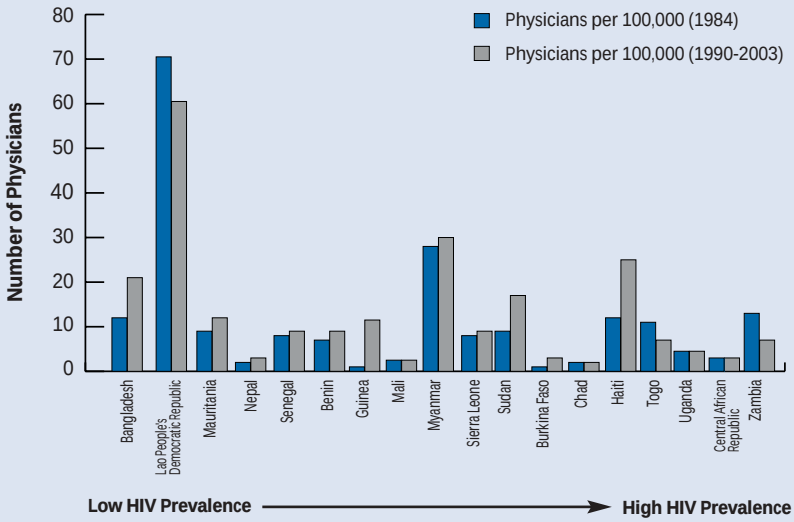
The civil service in many countries will experience close to catastrophic rates of retirement if the health sectors are unable to function and to provide care and treatment.

Examples already exist. For instance, in Mali, the National Union of Malian Workers, which includes the National Union of Health Workers, launched a two-day strike over the government's delay in revising the salary scale and the great wage disparity between contractual workers and their counterparts in public service. Zambia provides another example. Here, scores of junior doctors, nurses, and support staff went on an indefinite strike at Zambia's largest hospital, the University Teaching Hospital in Lusaka. The issue was unpaid housing allowances (JLI, 2004).

In fact, the health systems in HIV/AIDS affected countries are experiencing converging treats due to HIV/AIDS. First, it increases the workload and skills demand on health workers. Second, in many countries health workers are falling ill and dying. Third, health workers have to cope with the psychological stress of offering palliative care to increased numbers of dying patients, along with caring for their own sick families and relatives (JLI, 2004).

The capacity challenge that many LDCs face renders it imperative that the health sector be strengthened. The civil service in many countries will experience close to catastrophic rates of retirement if the health sectors are unable to function and to provide care and treatment. Therefore, increased efforts are needed across LDCs in order to mitigate the growing crisis.

Figure 9 | **Physicians per 100,000 in 1984 and approximately a decade later**



Sources: *UNDP Human Development Report 1990* and *UNDP Human Development Report 2004*

Recent studies indicate that 19 to 53% of the mortality of African civil servants is currently attributable to HIV/AIDS and estimate that by 2005, 28 to 41% of the health workforce in the worst affected areas will be HIV-positive. Only treatment can prevent their deaths and avert such a multifaceted catastrophe.

UNAIDS, 2004

Unless immediate and determined action is taken to strengthen the health sector in the majority of LDCs, the combination of increased demand for and decreased supply of health services is bound to create overload, putting serious pressure on the system and decreasing the quality of services.

Unless immediate and determined action is taken to strengthen the health sector in the majority of LDCs, the combination of increased demand for and decreased supply of health services is bound to create overload, putting serious pressure on the system and decreasing the quality of services. It is necessary to stem the loss of health sector workers due to negative work environment, the out-migration of highly skilled professionals, and AIDS-related deaths while investing wisely for the immediate and long terms (JLI, 2004). Additionally, in order to achieve the recommended minimum level of 2.5 health workers per 1000 population, it is imperative to accelerate training for professionals and auxiliary health workers (JLI, 2004).

Using mid-level health cadres, such as community health workers, village health workers, and associated nurses to supplement more traditional professional categories will be part of any successful strategy. These alternative health cadres have at least two immediate advantages compared to their traditionally educated colleagues. They are less likely to migrate to join health sectors in OECD countries, and their shorter education enables LDCs to accelerate the production of additional human capacity far beyond what would have been possible if they were confined to the traditional health professions (Dovlo, 2004).

7.2 Education sector responses

In the education sector, the negative impact of the HIV/AIDS epidemic on staff and consequently on the supply of public services is, in most cases, more or less the same as in the health sector. However, the demand for education does not increase as in the case of the health sector. The dynamics behind the demand for education is radically different from the demand for health services.

In many cases, AIDS-affected families take their children out of school so that they can contribute either to the family's income generation or to the care of sick relatives. School enrolment in the Central African Republic has already fallen by 20 to 36% as a result of AIDS orphans dropping out of school, according to government reports (UNDP, 2002). Orphans are similarly affected and likely to discontinue schooling when they are left to fend for themselves. The tendency towards pushing vulnerable children out of the education system is further aggravated if school systems enforce cost recovery policies. Thus, some countries, such as Uganda, have removed education user fees (UNAIDS, 2004).

The World Bank has already projected in 1998 that in Malawi, for example, over 40% of educational personnel in urban areas would die as a result of AIDS by 2015.

ILO, 2004

By 2006, an estimated 45,000 trained teachers will be needed to make up for those lost to AIDS in Tanzania, where 100 primary school teachers are now dying each month as a result of the disease. The loss of teachers results in either cancellation of classes or combining them to create classes of 50 to 100 pupils.

ILO, 2004

De-schooling caused by poverty brought on by HIV/AIDS only leads to further impoverishment. Under-skilled youth find themselves entering the labour force prematurely with few or no skills, in highly marginal work.

De-schooling caused by poverty brought on by HIV/AIDS only leads to further impoverishment. Under-skilled youth find themselves entering the labour force prematurely with few or no skills, in highly marginal work. Thus the most severe impact of HIV/AIDS on the education sector lies ahead. For example, a US Bureau of the Census study estimates that 6 out of the 26 countries worst affected by HIV/AIDS will have such declines in enrolment rates that they will show absolute reduction in their schooled population by 2015 (ILO, 2004).

In LDCs with high HIV prevalence rates teachers and lecturers belong to the most HIV-affected age group, although vulnerability patterns differ between countries. Many teachers migrate to the school they are assigned to, sharing the same vulnerabilities as other migrant workers.

Given the seriousness of the epidemic among teaching staff, it is apparent that this can lead to a serious decrease in the supply of education. In Congo, for example, some schools have reportedly been forced to close entirely for lack of teachers, (Hamoudi & Birdsall, 2002).The quality of education provided is also clearly threatened. Even when

> **In Botswana, Malawi, and Uganda, teacher mortality rates were broadly compatible with general population rates, while they were higher among both primary school and male teachers. In Zimbabwe, male and female teachers have infection rates similar to those in the general population: about 19% for males and 28% for females.**
>
> UNAIDS, 2004

schools are able to continue, a decline in staff can lead to a higher student per teacher ratio. Sickness and death among teachers will probably impede the ability of teachers and students to teach and to learn—factors that will affect the quality of education negatively.

Solutions may include strategies such as using teaching assistants to relieve the burden of trained teachers while developing their own skills through school-based apprenticeship-like programmes. Teachers' training could become modularised, allowing teachers to start teaching earlier with less qualifications and then train and develop their skills as needed (Lewin & Stuart, 2003). Further, schools and teacher colleges should engage in closer cooperation, enabling colleges to become dynamic and innovative centres of professional development, strengthening the school system by providing advisory support and continued teacher training.

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7.3 Responses in agriculture, food production, and the environment

As already indicated in a previous chapter, agricultural extension is one of several key sectors, which—at least in some countries—is already severely affected by capacity loss, caused by HIV/AIDS.

Similar results can be found in other sectors of relevance for agricultural production and environmental protection. For instance, in the Ministry of Agriculture and Irrigation in Malawi, attrition levels increased from 0.8% in 1990 to 9.6% in 2000. In the Ministry of Water Development, attrition rates rose from 5.6% in 1990 to 11.8% in 2000. It is unlikely that these ministries will be able to continue to perform without decreases in output resulting from decreases in available human resources (UNDP Malawi, 2002).

HIV/AIDS affected households will try to adapt by farming smaller plots of land and cutting back on weeding. Land is also often left fallow and becomes affected by erosion and degradation. This creates additional obstacles to future agricultural development as well as causing environmental damage such as decrease in fish stock and increased vulnerability to flooding and drought.

Successfully applied responses in agricultural include: introducing labour- and capital-saving agricultural and household technologies and practices; enhancing household income-generating capacity; promoting women's and children's rights to land and property; and agricultural skills training for adolescents. With regard to national policy initiatives, the following recommendations can serve as guidelines in attempts to mitigate capacity erosion in the agricultural sector. Ministries of Agriculture can undertake a number of initiatives to mitigate the impact of the epidemic, including:

- Adopt an HIV/AIDS mandate,
- Address rural producer needs and circumstances,
- Address HIV/AIDS as a contributing factor to food, nutrition, and livelihood insecurity and factor labour constraints into the formulation of smallholder agricultural policies and programmes,
- Factor households' coping mechanisms to HIV/AIDS in the formulation of smallholder agricultural policy and research,
- Promote low-risk, low-input strategies for female-headed households, and for households headed by the elderly and by youths and orphans,
- Protect land ownership rights, particularly among women and children,
- Mainstream HIV/AIDS in MoA policies, programmes, and operations (UNAIDS & FAO, 2003).

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7.4 Responses in transportation

The transportation sector is by definition characterized by mobility and migrant workers. In many countries, the high degree of mobility has led to a relatively high level of HIV-infection rates. Roads remain the dominant mode of transportation in Africa, accounting for 90% of inter-urban transport (UNECA, 2004). Numerous studies have documented the susceptibility of long-distance drivers to HIV infection and how transportation can facilitate conditions which make HIV transmission ever more possible (World Bank, 2003). Fully in line with these expectations, a number of LDCs have reported higher than average infection rates among transportation workers. These include Burkina Faso, Lesotho, Malawi, Senegal, and Uganda.

It is imperative to find and consistently apply a variety of preventive interventions to remind all transport personnel that they are most susceptible to HIV when they practice

high-risk sexual behaviours. Responding to this challenge, a number of LDCs, including Eritrea, Ethiopia, and Zambia have been working to include AIDS prevention in all transportation projects under the auspices of the respective Ministries of Transport (World Bank, 2003).

In Uganda, AIDS hit employees of the Uganda Railway Corporation hard. It has experienced a labour turnover rate of 15% per year in recent years.

(ILO, Consequences for labour and socio-economic development in selected African countries)

Further, countering the special vulnerabilities of this sector, a number of companies have begun to take action. For instance, in Burkina Faso, companies involved in railway transportation and telecommunication are aware that they depend on highly skilled migrant labour. Some are already planning awareness meetings to limit the vulnerability of employees and curb costs in connection with attrition among workers (ILO, Consequences, op. cit.).

Confronting AIDS across the transport sector is critical important. When successful, interventions can play a unique role in preventing the spread of HIV/AIDS across and between LDCs.

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7.5 The way forward for basic services

Recognising the seriousness of the capacity challenge created by the AIDS epidemic, it is imperative to develop innovative strategies that can mitigate the impact on the public sectors' capacity to deliver goods and services. Some strategies will be sector-specific, whereas others can be applied across sectors.

The available strategies include prevention, treatment, and impact mitigation. The LDCs will have to apply these to their fullest in order to curb the impact of the epidemic on their human and institutional capacities. The strategies will need to be applied in ways that are highly efficient and mutually reinforcing.

Preventive actions can help limit the spread of HIV/AIDS. Workplace-based preventive programmes have already proven their value; good practices have been developed and such programmes should be efficiently and comprehensively implemented across the public sector. Governments facing HIV/AIDS-caused capacity erosion need to adopt a clear employment policy on HIV/AIDS in the workplace, addressing issues such as testing, stigma and discrimination, disclosure, absenteeism (including sick pay), and support services.

Programmes providing people living with HIV/AIDS (PLWHA) with treatment and care will protect existing human capacity and contribute to increased quality of life and better health for affected individuals. Keeping them in the workforce longer will benefit all. Such programmes include efforts to provide Antiretroviral (ARV) therapy as well as other care and treatment options.

In responding to the low base of public employees delivering basic services, it is critical to combine emergency measures with long-term strategic planning. This includes factoring the cost of attaining the proper ratio necessary for basic service delivery into macroeconomic policy planning, economic estimates, and national development plans.

In order to address LDCs shortcomings in service delivery and institutional capacity building, specific measures are needed to improve and support technology intervention and innovation for appropriate input in mitigating the effects of capacity erosion (e.g. introduction of solar energy where national greed are not available to service schools and hospitals).

Summary of recommended policies for the health sector

Innovative strategies to keep people in their positions and rapidly scale up the number of staff are necessary to secure the future functionality of the health sector in particular. Practical initiatives include using mid-level health cadres, such as community health workers, village health workers, and associated nurses to supplement more traditional professional categories such as nurses and doctors. Alternative health cadres have at least two immediate advantages compared to their traditionally educated colleagues. They are less prone to migrate, and their shorter education time span enables LDCs to accelerate human capacity development towards meeting the rapidly increasing needs of this specific sector.

Governments facing HIV/AIDS-caused capacity erosion need to adopt a clear employment policy on HIV/AIDS in the workplace, addressing issues such as testing, stigma and discrimination, disclosure, absenteeism (including sick pay), and support services.

Summary of recommended policies for the education sector

In the education sector, innovative strategies such as revising training curricula and multi-grade teaching can mitigate the impact of AIDS. However, additional actions need to be taken to scale up education efforts in order for LDCs to replace lost human capital and, preferably, increase the level of human capital available to drive forward the development process.

Solutions responding to the severe need for additional trained teachers include strategies for accelerated teacher training including school-based apprenticeship-like programmes. Teachers' training could become modularised, allowing teachers to start teaching earlier with fewer qualifications and then train and develop their skills as needed. Further, schools and teacher colleges should engage in closer cooperation, strengthening the school system by providing advisory support and continued teacher training.

The experiences gained in countries such as Zambia with regard to identifying children who need subsidies to gain and keep access to education can also add value to programmes directed at securing continued school enrolment for vulnerable children.

Strategies for encouraging more involvement of the private sector and the civil society to the education sector are recommended for the LDCs. Contribution of the private sector to the education in different public-private partnership models would not only ease the efforts of the public sector in the field but also would be a good example of the corporate social responsibility in LDCs. Participation of the civil society in education, as well, would have positive effects on general performance of the sector and the sustainability in the field which is declining due to the HIV/AIDS.

8 Brain Drain and Capacity Erosion

International migration is one of the central dimensions of globalisation. Facilitated by improved transportation and communication, and stimulated by large economic and social inequalities in the world, people are increasingly moving across national borders in an effort to improve their own and their families' well being. In the past few decades, international movements of people have increased alongside, though not equal to, the expanded international flow of goods and capital. International migration is an increasingly worldwide phenomenon, involving a growing number of states. The forces underlying these trends are unlikely to reverse, so these international movements of people will continue, and most probably increase, in the future.

The number of international migrants in the world had risen from 76 million in 1960 to 82 million in 1970. The number reached 100 million in 1980 and increased to 154 million in 1990. By 2000, an estimated 175 million persons were living outside their country of birth (UN-DESA, 2004). Of these, about 158 million were deemed international migrants; approximately 16 million were recognised as refugees fleeing out of a well-founded fear of persecution; and 900,000 were asylum-seekers. In relative terms, Oceania has the largest ratio of migrants to total population, followed by Northern America, Europe, and Africa (UN-DESA, 2004).

Migration imposes a number of challenges on source countries. The departure of a skilled migrant signifies a loss of human capital, a capacity loss, and a loss of future tax payments, thus constituting a financial loss. In developing countries, it is important that this phenomenon be counterbalanced by efforts to take advantage of enhanced skills and experience of the expatriate population, with programs to facilitate remittances and encourage migrants to return. In crucial employment sectors, such as health and education, governments also need to adopt specific programs and incentives to stem the tide.

International migration poses a particular problem for LDCs. This will be explored in the next section.

8.1 Additional burden: the brain drain

In addition to losing staff to the HIV/AIDS epidemic, many LDCs face the additional problem that their health sectors in particular are being drained of educated staff through organised "brain drain" caused by demand in the industrialised world. Migration is one of the major contributors to the continuing shortages of health workers, and all the countries in the region (sub-Saharan Africa) seem to suffer from this phenomenon. The cost of the brain drain to sub-Saharan Africa is huge, especially when related to the fact that some of these countries are amongst the poorest in the world. A Joint Learning Initiative (JLI) report on migration of health sector personnel states: "The effect of migration not only in terms of numbers as the loss of a few highly specialised cadres that are scarce can lead to complete collapse of a particular service in a country" (Dovlo and Martineau).

Zambia lost all but 50 of 600 doctors trained since independence and it is reported that there are more Malawian doctors in Manchester than in Malawi.

JLI, 2004

According to Addis Ababa University 40 to 60% of the staff members who were sent abroad for postgraduate studies never came back.

Ethiopia Country Review, 2005

In addition to losing staff to the HIV/AIDS epidemic, many LDCs face the additional problem that their health sectors in particular are being drained of educated staff through organised "brain drain" caused by demand in the industrialised world.

The African Union estimates that given the cost of training—training for a general practice doctor being estimated at US $60,000 and other paramedics at US $12,000 low-income countries "subsidize" developed countries with US $500 million annually. Further, this estimate is probably relatively low since it only focuses on the direct costs of tertiary education. It does not take into account the prerequisite of primary and secondary education. Given the scope of the problem and the double challenge LDCs face from a low level of human and institutional capacity as well as the ongoing HIV/AIDS epidemic, brain drain is a serious additional and unwelcome challenge.

In a speech made in Rome at the World Food Summit in 1996, Fidel Castro revealed that 3,000 Cuban doctors in a wide rage of specialist fields have migrated to work in the USA. However, Cuban doctors are not only migrating to OECD countries, many are deployed in developing countries, including LDCs, as a result of Cuba's effort to assist other

developing countries in their human and institutional capacities. Cuba's support to health sectors in other developing countries is a significant example of south-south collaboration, illustrating the benefits to developing countries if they increase and systematize south-south collaboration supporting capacity protection and development.

8.2 Factors pushing qualified personnel to migrate

There is no single reason people decide to migrate. It is an individual decision, often based on a complex evaluation of numerous factors. However, a number of key variables are often found to contribute to the decision to migrate.

Public employees are part of the civil service and directly affected by civil service reforms. Lately, civil services across developing countries have been reformed, usually through downsizing, severance, new wage scales, and realigned benefits. For such reforms to be successful, they require ownership by all stakeholders and sensitivity to those who lose out (JLI, 2004). In many cases, this has not been the situation when civil service reforms have been implemented, especially when reforms are a reaction to outside pressure from key donors and development partners.

Interlinked to this issue is the question of wages. They may not be sufficient for personal and family requirements. Salaries may not be adjusted for cycles of inflation, and they may not be paid in a timely manner. In fact, in many LDCs, civil service wages have fallen dramatically in recent years. In Tanzania, a civil servant's wage in 1998 was only 70% of that in 1969 (JLI, 2004). In that time it was also revealed that a top Tanzanian civil servant living in the capital, Dar es Salaam, received a salary that was only 1% of the salary received by his international counterparts.

Further, no matter how hard-working and dedicated workers are, they know their efforts will be futile without resources and technology. The decay of infrastructure and the absence of key resources and supplies are not only discouraging; they are also limiting (JLI, 2004).

> **In 2004 all qualified health workers in the remote Melekoza district in Southern Ethiopia vacated their posts because of a lack of supplies, leaving 100,000 people in the care of the single sanitarian with only two years of post-secondary training.**
>
> JLI, 2004

Additionally, civil unrest or insurgencies are often followed by migration waves. As an example, the number of migrants leaving Nepal has increased from 2,134 in 1995/96 to 125,256 in 2004/05 as a result of the on-going insurgency (Nepal Country Review, 2005).

8.3 Factors pulling qualified personnel to migrate

Behind the factors pulling human resources to migrate to wealthier countries is a need in these countries for well-qualified professionals. The demands for professionals in the health sectors of developed countries are astonishing. For example, at present Australia reports a lack of 5,000 nurses, and a recent survey in the United States indicated as many as 126,000 vacant nursing positions (JLI, 2004). It is estimated that over the next ten years an additional one million nurses will be needed by the United States to meet its domestic shortfall in the education of nurses. The trend is shared by most OECD countries, including Great Britain, New Zealand, and Portugal (Abuja, 2004).

By far, the largest share of the physicians educated in the LDCs, for instance, those from Cape Verde, Sao Tome, Principle, and Guinea-Bissau ended up migrating to Portugal. So did half of those educated in Angola (Abuja, 2004).

Additional factors pull human resources out of LDCs to receiving countries. A key pull factor is economic compensation. For instance, even when they come from middle-income countries, nurses can easily receive four times the original wage when they migrate (Dovlo & Martineau, 2004). Doctors who migrate from middle-income countries face similar conditions. Doctors and nurses from LDCs often face even higher potential wage increases since their base salaries often are significantly lower.

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Career development is also sometimes highlighted as an important pull factor. Migrants generally expect that their career development and training opportunities will improve when they migrate (JLI, 2004).

Thus, if LDCs are to keep their key human resources, issues such as pay, career development, and training need to be addressed. Further, a number of other variables influence job satisfaction, such as on-the-job recognition, and professional commitment. Addressing these variables may help limit the inclination among staff members to migrate (JLI, 2004).

8.4 Gender and Migration

As of 2000, 49% of international migrants were women. However, despite the apparent equality in the number of men and women migrating, gender relations have significant influence on the opportunities for women from LDCs to migrate internationally. Further, gender relations and gender stratification in both origin and destination countries will have a significant impact on decision-making leading to migration (UN-DESA, 2005).

An area of considerable importance for future policy-making is the demographic gap emerging between the wealthy countries with declining fertility and poorer countries

with continued population growth. In view of the higher life expectancy at birth and aging population in the wealthier countries age, the demand for health services and caregivers will increase. Since women are disproportionately found in nursing and caregiver services, experts posit a likely increasing demand for female migrant labour in those traditionally female occupations (UN-DESA, 2005).

Women also contribute to the economic and social development of both origin and destination countries, through remittances, diaspora investments, and human capital gains on return (UN-DESA, 2005).

Thus, it is paramount to employ a gender sensitive perspective when analysing and addressing migration issues. This is particularly important for ensuring safe migration. In many cases, unlike the pattern of male migration, women do not fully control the migration process and are less aware of the opportunities available and they lack support to plan their migration. Traffickers often fill the gaps the legal and social structure has denied women. Trafficking and illegal migration, particularly of women, must be understood in the context of the gender division of labour, structural disadvantages suffered by women in the gender-divided labour market and the world-wide feminization of labour migration on the one hand, and increasingly restrictive immigration policies of recipient countries on the other. It will be important to improve the status of women and of women's work to limit capacity erosion, especially in the health sector. Failure to do so will most likely render many LDCs incapable of stemming the outward stream of health professionals, eroding their capacity to deliver key basic services.

An often-overlooked element of migration is human trafficking, especially trafficking in women and children. A number of LDCs involuntarily serve as source countries for trafficking, including Myanmar, Cambodia, and Nepal. A significant number of Nepalese women and girls are trafficked to India and other Asian countries with the purpose of exploiting them in the sex industry of destination countries (Nepal Country Review, 2005).

Women also contribute to the economic and social development of both origin and destination countries, through remittances, diaspora investments, and human capital gains on return.

8.5 Reversing the trend

The scope of the brain drain on the countries most seriously affected calls for immediate, innovative action. Obviously, neither the public nor the private sector in LDCs will be able to compete with developed countries in regard to salaries and benefits. Thus, LDCs will have to combine a strategy of improved pay and additional non-financial incentives, such as education and empowerment, to improve job satisfaction among staff. This will also mitigate the tendency for many educated professionals who perform crucial public sector functions to leave the public sector to seek better pay in private sector jobs.

A number of countries have made student loan repayment dependent on in-country service. As an example, if a graduate in Lesotho takes a government job, he or she will have to pay back 50% of their student loan; if they take a job in the private sector in Lesotho, they will have to pay back 75%; whereas they have to pay back 100% if they choose to migrate. However, monitoring and follow-up to the policy appears to be inconsistent, and the effects of the policy have been questioned (Lesotho Country Review, 2005).

A study undertaken by GTZ in 2003 covered 29 countries, of which 18 are from Africa. In addition to identifying a number of problems in keeping health sector staff, the study also revealed a number of programs and policies that enhanced job satisfaction. For example, in Zambia, the introduction of refresher training for medical staff seems to have led to a very high retention rate. In Ethiopia, a mix of continued medical education, the provision of housing, the establishment of a clear career structure, and a defined number of services in hospitals has led to improved staff satisfaction and retention (Mathauer & Imhoff, 2003). Thus, improving the quality of the management systems enabling health sector staff to perform their duties professionally will in itself contribute to a positive cycle. Increased professionalism contributes to increased job satisfaction, which contributes to lower attrition rates and thus better staffing. This will enable the health sector to continue to increase professionalism and the quality of health services.

Improving human well being in the developing countries by achieving the Millennium Development Goals should, for example, reduce the large numbers of people who would emigrate if they had the opportunity

The migration of key human resources should be addressed in cooperation with development partners and multilateral initiatives are required to manage international migration. The complexity and growing scale of international migration have compelled governments to move from a unilateral approach to enhanced regional and international cooperation. The 1990s witnessed a renewed willingness of governments to undertake cooperative efforts to find novel ways of ensuring orderly migration. Bilateral arrangements on international migration, are not new and there has been an upsurge in the number of agreements concluded since 1990. However, a bilateral approach has generally a narrow geographical focus, thus, it makes a limited contribution to the regional or global management of international population mobility (UN-DESA, 2004).

Given the need for and the pressure to deliver health services within OECD countries, LDCs will have to respond as decisively as possible to loss of personel. Responses include improving the working conditions of health and other professionals. The first responsibility is to improve conditions and opportunities for potential migrants in their home countries. Improving human well being in the developing countries by achieving the Millennium Development Goals should, for example, reduce the large numbers of people who would emigrate if they had the opportunity (UN-DESA, 2004).

The loss of skilled personnel to developing countries is related to the migration policies of destination countries wishing to attract persons with needed skills whilst reducing their investment costs. To reduce the negative effects of the brain drain, destination countries should ensure that the selection of skilled migrants does not end up removing a critical proportion of the skilled personnel from developing countries, particularly in areas such as health, education, and information technology. Coordination in this respect is crucial. For that reason, efforts to reduce the outflow of essential personnel from developing countries should be made at, the multilateral and regional level. A complementary and useful approach would be for destination countries to defray the training costs involved if they continue attracting migrants from sectors where human resources are limited.

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Effective governance systems are clearly a prerequisite for any successful response to the capacity challenge facing LDCs. Governments need to strengthen their ability to respond, and good governance practices require strong institutions to ground them and provide continuity. Good governance practices not only enhance the ability of LDCs to address the capacity challenge. Increased efficiency of government structures might make it possible for affected LDCs to increase service deliveries even when they will have to accept staffing at slightly lower numbers. Evidence suggests that corrupt practices in procurement and reward systems can undermine institutional integrity and results.

The negative impact on administrative capabilities will equal those already analysed in specific sectors such as health and education. However, it is generally assumed that through good governance, increased efficiency will improve service delivery even without adding new inputs to a specific sector. As an example, Ethiopia's Ministry of Capacity building has identified 6 areas where immediate strengthening is needed. They are: 1) management of financial and human resources; 2) low level of information technology in the public sector; 3) growing public demand for improvements of the justice system; 4) integrity issues in revenue collecting institutions; 5) lack of clear legislation; and 6) services could be delivered more efficiently and effectively (Ethiopia Country Review, 2005).

Improved governance and transparency will contribute to mitigating the challenge of brain drain, which as noted earlier, severely affects several sectors in many LDCs. Support in developing good governance will contribute to the mitigation of the crisis. However, before any capacity development programmes are started, it is critical to clearly identify goals and priorities for the intervention. Without this, people could be trained, organisations built, and institutions strengthened for no clear long-term purposes. Systems might be developed that do not improve economic growth or do not meet people's needs (UNDP, 1997). Given the gravity of the HIV/AIDS challenge to human and institutional capacities, combined with increased demand for a number of

public services, it is imperative that goal-oriented reforms focus on basic services and the core functions needed to keep society coherent and functioning.

Many governments face difficulties in hiring and retaining well-educated civil servants a problem that is often associated with the low prestige of public service. Some governments find the task of recruitment more difficult than others. It is imperative that governments address this threat to the continuous development of their human resources. Actions will include improving performance by government institutions and committing to merit-based appointments for public sector positions. However, many LDCs, including Ethiopia, have yet to adopt a human resources policy (Ethiopia Country Review, 2005), which seriously impedes the capacity for strategic planning of human resource management.

Institutional development promoting good governance can mitigate the impact of the HIV/AIDS epidemic's erosion of human resources and contribute to the mitigation of the crisis. If left unaddressed, the crisis will surely roll back development and prevent many LDCs from achieving the targets of the MDGs. On the other hand, lack of good governance will limit the response to the epidemic, and its effects will exacerbate an already serious situation.

Capacity development promoting good governance can mitigate the impact of the HIV/AIDS epidemic's erosion of human resources and contribute to the mitigation of the crisis

The critical importance of governance is highlighted by the experience of Nepal, where studies identify governance issues, including weak institutional capacity, as the country's most crucial capacity issue. This will have to be comprehensively addressed before the country will be able to accelerate development towards the MDGs (Nepal Country Review, 2005). Similarly, institutional capacity issues are also identified as key challenges in Lesotho, seriously impeding the successful implementation of programmes and policies (Lesotho Country Review, 2005).

9.1 Political choice or market

A special aspect of governance and HIV/AIDS is how to balance market imparitives with government management of policies and service delivery. There are cases where the two institutions of market and government have created negative synergy. Key programmes have been discontinued, and macroeconomic policies have limited necessary social programmes, which may have contributed to the spread of the virus. However, at other times positive synergies have emerged between government policies and markets, creating new opportunities by providing conditions favourable for economic growth, thus expanding the tax base of the country. Nevertheless, the field is of such importance that special attention needs to be directed towards the issue and policies implemented to tackle negative synergies and to promote positive interaction.

Market forces are behind the pull effect, which particularly drains the health sector of human resources. Additionally, the provision of low-cost generic drugs for AIDS treatment

has been limited due to patent rights and other restrictions originating from the global market economy. This has severely limited access to treatment for those most in need.

However, health sector planners and employees often find that there are additional limits on their ability to act. Decisions on resource allocation and other aspects of macroeconomic policymaking are often taken with little or no consultation with those responsible for HIV/AIDS and the health sector as a whole. For example, Zambia became eligible for the Highly Indebted Poor Country (HIPC) Initiative under a government agreement with international financial institutions to maintain its public sector wage bill at no more than 8% of GDP. In Mozambique, the government's macroeconomic discussions with international financial institutions aim to reduce its wage bill from 8.5% to7 % of the country's GDP (*Scaling Up HIV/AIDS Treatment in Africa: Linkages with Macroeconomic and Fiscal Policies,* 2004).

Similarly, school fees might serve cash-strapped governments' need for financing, but they also generate a significant barrier to school enrolment. This undermines and ultimately limits a country's capacity for development. Apparently, a number of important donors have changed their position on this issue, and the idea of free primary schooling is gaining ground (World Bank, 2005).

Increased communication between the health sector, the ministry of finance, and international financial institutions is necessary. This will avoid miscommunication and ensure that the necessary information is transferred not only to the health sector staff presenting them for the "economic necessities." It will also enable the ministry of finance and international financial institutions to understand the needs of the health sector. These needs should be given priority, and when the situation dictates, their allocations should exceed the financial resources advised by economic dogma.

Recent research such as AIDS in Africa: Three Scenarios to 2025 has vividly illustrated that business-as-usual will not do, if HIV/AIDS is to be addressed decisively.

9.2 New international partnerships for capacity development

Recent research such as *AIDS in Africa: Three Scenarios* to 2025 has vividly illustrated that business-as-usual will not do, if HIV/AIDS is to be addressed decisively. (UNAIDS, 2005)

LDCs require assistance, as they often cannot meet their basic needs from domestic resources. International support for the LDCs should be consistent with the BPoA, which outlines the main priorities. Targeted interventions supporting these priorities can enable many to break out of the poverty trap. However, the success of interventions heavily depends on external actors, especially the trade polices and actions of the major developed countries and trade blocs.

Priorities include: reduce extreme poverty; develop human and institutional resources; remove supply-side constraints and enhance productive capacities; accelerate growth; secure environmental protection; and attain food security.

Efforts are underway to address different aspects of the capacity issue. Some are addressing capacity in specific countries, such as the Department for International Development (DFID) programme for capacity development in Malawi's health sector. Others address specific issues such as Education for Health in Africa (EHA) and the Joint Learning Initiative (JLI), both of which address human capacity development in the health sector. The Multi-Site Teacher Education Project (MUSTER) aims to increase human capacity development in education.

The UN system has a vital role to play in responding to capacity challenges. As part of a wider agenda supporting people living in LDCs to take charge of their own futures, capacity building clearly emerges as a main component. In this regard, UNDP plays a key role due to its comparative advantages as a global development network with strong capacity development expertise.

Closely linked to the issue of capacity development is the issue of partnership for effective governance. Support to develop effective public administrations on national and international levels is one of the key tasks the UN system will need to successfully undertake if the MDGs are to be met. On the international level, the UN system can support governance by supporting better alignment of aid with national development strategies and priorities. The international community must pool expertise and financial resources and develop joint country responses, with harmonized implementation arrangements. Monitoring should foster a sense of public responsibility and accountability, thereby increasing the effectiveness of technical assistance provided by the international community.

The international community must pool expertise and financial resources and develop joint country responses, with harmonized implementation arrangements.

UNDP works to support this, in some 135 countries to build national capacities for improved and accountable governance. It devotes more than 60% of its global technical assistance expenditures to activities in this field.

Responding to the specific capacity challenges facing the countries in southern Africa, the UNDP, Country offices in southern Africa, development partners, and other United Nations organizations are promoting, supporting, and implementing a new initiative—the Southern Africa Capacity Initiative (SACI). SACI is a framework promoting responses in a number of critical delivery areas. It supports countries in southern Africa to design and implement a set of additional actions and strategies that address the complex human capacity and service delivery challenges in a systematic and integrated manner. The framework calls for a new sense of urgency to meet capacity needs that will facilitate the achievement of the MDGs and the respective national development plans. SACI will work to support governmental efforts in four areas: adapting and delivering policies to effectively increase the capacity for public service delivery; promoting new and

expanded options for delivering key services; supporting innovative and urgent training for meeting intensified demands for skills and capacity; and advancing capacity stabilization, maintenance, and utilization to offset the immediate loss of skilled human resources. Other initiatives to address capacity issues, especially within the health sector, include EHA and JLI.

To conclude, it is clearly central to create sufficient synergies between multiple initiatives such as SACI, EHA, JLI and other entities to secure the highest return on these multiple investments in capacity. The global response to HIV/AIDS currently boasts of unprecedented financial resources available for AIDS responses. Yet concerns are frequently raised about the absorptive capacity of countries to make effective use of these resources. This is an additional reason to ensure harmonization and alignment around capacity development efforts. The UNAIDS leading *Three Ones* initiative advocates support to: one national AIDS authority, one national plan of action, and one monitoring and evaluation system. A rationalized mechanism to coordinate the systematic implementation of all the elements of the National Plan of Action will be important to achieve the identified targets and goals of the Plan.

The Global Fund is one of the financial resources available for LDCs in combating HIV/AIDS and developing HIV/AIDS related capacities. It was created following the stakeholders' consultations that led to a consensus in 2001. Its total funds approved for the use of LDCs are USD 1,598,349,711. Funds committed by Grant Agreements are USD 949,155,002. Funds disbursed until 31 December 2004 are USD 406,029,105 which are only 25.4% of total funds available for LDCs.

The table in Annex 2 provides a compendium of the resources distributed by the Fund to LDCs as for 2004.

Box 4

Reasons for Hope–LDCs Helping Themselves

(Country Reviews, 2005, Ethiopia, Lesotho, Nepal, Uganda)

Ethiopia—"There is sufficient scope for Ethiopia to attain the goal of halving poverty by 2015 if it commits to a growth path that is broad-based and pro-poor in line with its current development strategies." (2004 MDG Report)

Lesotho—The government of Lesotho is taking its challenges seriously. Accordingly, it has revised its MDGs, putting combating HIV/AIDS and poverty as its first and second goals, recognizing their interlinkage.

Nepal—Signs of a modest economic recovery are showing, with GDP growing by 2.3 in FY 02/03 and projected to keep growing through 2006.

Uganda—Striking success in affecting HIV/AIDS infection rates, some macroeconomic reform, increased political stability, effective governance.

Box 5

Southern Africa Capacity Initiative – SACI Action Areas

Enhancing the policy environment at the national level for effective and efficient service delivery

- Action Area 1.1: Develop a Capacity Mobilizing Toolkit for system wide capacity assessments and development
- Action Area 1.2: Advocacy to promote policies, concepts and products that would mobilize human capacity for effective and efficient service delivery
- Action Area 1.3: Develop and promote new competencies for Strategic and Systems Thinking and Value Based Leadership
- Action Area 1.4: Strengthen Human Resource management systems and sup portive policy environments
- Action Point 1.5: Enhance and diversify national and Regional databases on human capacity

Developing new approaches for enhanced service delivery

- Action Area 2.1: Developing new concepts and models for re-organising service delivery
- Action Area 2.2: Implementing new ICT arrangements and packaging for service delivery at various levels
- Action Area 2.3: Develop an accountability framework for effective service delivery
- Action Area 2.4: Establish and promote innovations Facilities and Funds to promote and scale up good practices in service delivery

Develop innovative approaches for alternative training and education to meet the new demands for skills and human capacity

- Action 3.1: Initiate and strengthen policy dialogue for reinventing education and training programmes
- Action Area 3.2: Identify approaches for accelerated and alternative training
- Action Area 3.3: Introduce training of new competencies within public sector institutions

Promoting capacity stabilisation, maintenance and utilization

- Action Area 4.1: Facilitating the development and scaling up of national volunteer schemes
- Action Area 4.2: Assisting countries establish/strengthen National UN Volunteer (NUNV) schemes to reinforce capacity for service delivery
- Action Area 4.3: Deployment of International UNVs for critical gaps in Strategic Areas
- Action Area 4.4: Building and nurturing international partnerships for supporting national volunteer schemes
- Action Area 4.5: Strengthening government capabilities to co-ordinate, manage and facilitate volunteerism in order to obtain optimum benefit
- Action Area 4.6: Urgently work for the scaling up and sustainable management of ART

Additional information on SACI is available at: http://www.undp-saci.co.za

10 Strategic Options and Conclusions

Securing the necessary capacity for development is critical for LDCs to be able to accelerate their development towards achieving the BPoA and the MDGs.

The report presents a number of recommendations and conclusions. These are intended to provide useful tools for LDCs seeking to restore and increase capacities for development, and outline the needed action on the part of development partners.

In order for the LDCs to achieve the goals of the BPoA and the MDGs, improvement in human and institutional capacities is a key prerequisite. However, the HIV/AIDS epidemic continues to pose a threat to such developments. In this diverse group of countries HIV/AIDS constitutes different short- and medium-term challenges. HIV-infection rates continue to increase, especially in LDCs where infection rates are still relatively low. Thus, all LDCs need to address the capacity issue and many need to do so urgently. Without this resolute action, it will become increasingly difficult to achieve the MDGs and for people to fulfil their aspirations to live long, dignified, and productive lives.

The erosion of human capacity has already become a very serious problem in some of the LDCs notably in Southern Africa. Key institutions experience increased absenteeism and the resulting loss of productivity due to the emerging high HIV infection rates among staff and their families. Thus, given the scope of the challenge the epidemic presents, it is crucial to identify strategies to protect human capital. Some countries, such as Ethiopia, are addressing this issue in a comprehensive manner tackling capacity building in the public sector and private sectors, and in civil society while others like Zambia and Malawi have embarked on sector specific initiatives and policy direction aimed at mainstreaming capacity response to combat the epidemic.

Responding to the emerging human and institutional capacity crises, LDCs need to design, strengthen and implement strategies with regard to preventing transmission of HIV, offering care and treatment, and mitigating the social and economic impact of the

epidemic. Through comprehensive policy redirection that applies these strategies in a mutually reinforcing way, LDCs will be able to mitigate the emerging capacity crisis.

10.1 Preventing the spread of HIV/AIDS

Prevention is still the key to controlling the epidemic. There is no cure, and millions of people living with HIV and AIDS do not have access to any kind of medical treatment. Consequently, all countries need to scale up prevention efforts, especially for vulnerable groups and youth populations. However, there is room for hope. In Uganda, the HIV prevalence rate decreased from 18.5% in 1992 to 6.2% in 2004 (Uganda Country Review, 2005).

Where infection rates are relatively low, countries need to acknowledge the epidemic could spread rapidly. They need to include scaled-up prevention strategies as a key policy element.

Supporting workplace prevention programmes for employees and management must become a priority. So should providing health care in workplace settings and endorsing policies of non-discrimination. Such strategies have already proven valuable and should be widely applied. *The ILO Code of Practice on HIV/AIDS and the World of Work* is a framework for action that can be used to establish policy development principles, and which provides practical programming guidance.

Recognizing the importance of the informal sector in most LDCs, it is important that policies are developed to scale up prevention for this important segment of the workforce and that affordable prevention and treatment programmes are made available. Linking HIV/AIDS prevention interventions with Micro-Finance initiatives and institutions can also help provide necessary safety nets.

10.2 Care and treatment issues

Programmes providing PLWHA with care and treatment improve health and prolong the lives of affected individuals. Such programmes serve to protect existing human capacity and enable PLWHA to stay in the workforce, contributing their skills and knowledge appropriately. These initiatives include interventions to provide ARV therapy on a scaled-up basis as well as other care and treatment options. In Lesotho 2% of all allocations to ministries and institutions are budgeted for HIV/AIDS activities and increasingly for treatment purposes. Lesotho has also adopted WHO "3 by 5" strategy and aims to ensure treatment for 30,000 AIDS patients by the end of 2005 (Lesotho Country Review, 2005).

In many LDCs, approximately 90% of the care for AIDS patients is provided at home. This needs to be taken into account when care and treatment strategies are formulated. Initiatives ought to be developed to ease the pressure of the care economy on households and assist women cope with the increased burden of caring for AIDS-affected family members. Support programmes are essential, and national macroeconomic policies need to be designed to mitigate the impact of the increased burden of care and income-generation that the epidemic places on households, especially on their female members.

Involving men in providing care is a strategy that works. Often men who are heads of households are decision makers in the home and women are traditionally providers of the care. Although tradition in most cases exempts men from providing care, the Movement of Men Against AIDS in Kenya (MMAAK) has shown that some men are already making a difference by providing care. MMAAK has developed a programme that empowers men to support and provide home-based care for HIV-positive men, which the group feels strongly should not be provided by women. This would inevitably help young people change their perceptions on traditional gender norms, and in the long-term address gender biases specifically related to caregiving.

10.3 Mitigation strategies

Affected LDCs need to develop policies, programmes, and take actions that can serve to mitigate the unavoidable effects of the epidemic. One forward-looking strategy is to rapidly increase education efforts in order to replace the capacities eroded by the epidemic. In addition to securing primary education, attention must be paid to accelerating tertiary enrolment and artisanal capacity.

Additionally, LDCs can adopt innovative approaches to capacity building, including training of replacement staff and scaling up existing educational efforts. Developing strategies to focus on training periods and prioritize content and subjects, to educate basic service providers is also a well-tested approach that ought to be further explored.

Priority should be given to mitigating the impact of the epidemic on orphans and other vulnerable children, especially with regard to protecting them from exploitation, abuse, and HIV/AIDS, while securing their continued school enrolment. To the extent that LDCs with high HIV/AIDS prevalence rates are going to overcome the capacity challenge, they will need to protect children. If they fail to do so, it is very difficult to identify a scenario that will enable them to achieve their development goals.

10.4 LDCs—a diverse group with shared challenges

Although LDCs share a number of common concerns, they are characterized by their diversity and their special needs. Three key dimensions to the response to the capacity challenge and to the urgency of taking action are discussed below.

The first dimension is the event of the HIV/AIDS epidemic, which varies significantly among LDCs. Some countries, such as Bangladesh and Nepal, have relatively low HIV-prevalence rates, ranging from <0.2 to 0.5% respectively (UNAIDS, UNICEF & WHO, fact sheets, 2004). Other LDCs have generalized epidemics, such as Benin, Cambodia, Haiti, and Myanmar, with rates at 1.9, 2.6, 5.6, and 1.2% respectively (UNAIDS, UNICEF & WHO, fact sheets, 2004). Finally, a third group has high prevalence rates, such as Central African Republic, Zambia, and Lesotho, reporting average infection rates at 13.5, 16.5, and 28.9% respectively (UNAIDS, UNICEF & WHO, fact sheets, 2004).

A second important dimension is the country's human capacity base line. Depending on the human resources available, LDCs will clearly have different resistance to capacity erosion. Some LDCs have managed to educate and keep a significant number of educated people in the national workforce, increasing the level of human capacity, whereas other countries have given less priority to this issue.

The number of researchers per million inhabitants serves to illustrate the baseline capacity differences between LDCs. In Burkina Faso there are 17 researchers per million inhabitants (1997 data); Uganda 25 (2001); and Zambia 55 (1999). The figures are published by UNESCO (UNESCO, 2005).

Thirdly, some LDCs, despite all odds, have proven that they have the capacity to generate economic growth others have experienced negative economic development. Cambodia and Uganda for example, performed well with annual per capita growth rates of 4.1 and 3.9% respectively. Lesotho, Nepal, and Yemen grew at a slower pace with annual growth rates of 2.4, 2.3, and 2.5% respectively (UNDP, HDR 2004).

These three dimensions interact in each country, resulting in different degrees of urgency and difficulty in responding to the human capacity crisis. The level of urgency largely depends on how advanced the epidemic is. The higher the levels of education and the better the education system the stronger the resistance a country will have to erosion of its human resources. Finally, economic growth generates additional resources that can be applied in response to the capacity challenge and in the wider response to HIV/AIDS.

It is important to note that irrespective of the present extent of the epidemic, early actions towards accelerating economic growth and human resource development will strengthen the resistance of countries to the erosion of their human capacity.

10.5 Accelerating capacity development

Accelerated human capacity development and recovering capacity loss due to humanitarian or natural disasters can provide a number of lessons to countries that experience severe capacity erosion due to HIV/AIDS. Examples in countries such as Cambodia, recovering from the Khmer Rouge, and Rwanda after the 1994 massacre, can provide important lessons in capacity development and coping strategies.

Human resources in Cambodia are still at a very low level compared with most developing countries. Reconstruction strategies have changed, and a mainstream international aid regime is trying to address human resource development. However, though they are understaffed, basic services such as health and education are being delivered to an increasing number of people and progress towards a complete geographical coverage.

In Rwanda, 80% of the health care workers and 50% of the teachers had disappeared (UN, 2004). The new government outlined a strategy for rebuilding human capacity. It consisted of four priority objectives: 1. To reverse the inability of the public sector to attract and retrain qualified staff; 2. To address the alarming shortage of qualified manpower; 3. To uplift the low levels of productivity and quality service among staff; and 4. To promote capacity for social harmony. The policies were transformed into a number of specific actions including: increasing salaries for public employees; consolidating higher education measures to produce projected manpower requirements; strengthening capacity for strategic thinking, planning, budgeting, programming and accounting; building capacity for effective co-ordination of policies and operations; and consolidating civic and moral education (*Round Table Conference National Capacity Building*, 1996).

Such examples of accelerated capacity building give useful insights, where similar strategies can be applied to address capacity erosion caused by HIV/AIDS. As programmes and actions addressing capacity erosion in countries most affected by HIV/AIDS scale-up, the experiences gained will also provide extremely useful input to countries experiencing capacity erosion, irrespective of the causes. In this way, the different causes of capacity erosion and their solutions can generate cross sector learning, creating a fruitful synergy for evidence based results.

Box 6

What Works: LDCs' Successful Responses to Capacity Challenges

(Country Reviews, 2005, Ethiopia, Lesotho, Nepal, Uganda)

- *Ethiopia*—Ethiopia has established a Ministry of Capacity Building (2001) to address public sector capacity building, civil society capacity building, and private sector capacity building. Some of these programs have been deemed successful.
- *Lesotho*—The Ministry of Education and Training has been hailed by UNDP as a ministry that has been taken up the HIV and AIDS challenge. The government of Lesotho has directed ministries to set aside 2% of their budgets for anti-HIV/AIDS activities, which has aided in training and treatment.
- *Nepal*—Issues of governance and institutional capacity are being addressed through the passage of acts, bills, and directives which include anti-corruption acts and investigations of abuses of authority, policies allowing for decentralization and transparency of managerial and governmental bodies, and local tax fund allocation.
- *Uganda*—Establishing the Uganda AIDS Commission (UAC) in 1992, located in the Office of the President, and with comprehensive prevention programmes, Uganda was able to reduce its HIV/AIDS infection rate substantially.

Universal Primary Education—Future Capacity Builder

- *Ethiopia*—It is estimated that Ethiopia will achieve Universal Primary Education before 2015.
- *Lesotho*—Among African LDCs, Lesotho has traditionally managed to achieve a very high literacy rate. Free Primary Education has boosted primary school enrolment to 85%. The Ministry of Education and Training is aggressively addressing needs in the educational system.
- *Nepal*—Nepal's efforts at Education for All (2004-2009) and the Welcome to School program, with free tuition and free books, have aided enrolment. School dropout rates (students must often work to help feed their families) and teacher attrition (the Maoist insurgency renders some remote areas unsafe) remain as problems in retention of the high enrolment rate.
- *Uganda*—Since 1997, four primary/elementary school children per family could study without paying tuition. Enrolment more than doubled. In the year 2000, 99.3% of girls were enrolled in school.

10.6 Addressing capacity issues broadly and decisively

The report concludes that addressing capacity issues decisively in LDCs requires resolute action on the following recommendations.

Stakeholders are obliged to explore innovative human resource maintenance approaches in order to contribute more effectively to capacity development. Given the complexity and diversity of factors that affect capacity, there are no simple blueprints for capacity development. One common approach is to adopt strategies that can change governance and institutional norms and values in order to generate renewed commitment, create non-financial incentives, and reduce push factors for migration. These types of innovative perspectives can encourage leaders, decision-makers, and service providers alike to view human resources development not as a burden and a cost but as a long-term investment towards sustainable development. Additionally, the use of Information Technology is an innovation tailored to assist in developing skills and competencies more rapidly and on a wider scale.

Sub-regional and regional initiatives addressing capacity issues should be expanded to benefit all LDCs. The weakened capacity for sustained and efficient delivery of basic social services demands new innovative skills and approaches if countries are to achieve the goals of the BPoA and the MDGs. Such initiatives will provide much needed support, enabling LDCs to develop a new human capacity development model. Further, regional frameworks can promote responses in crucial service areas, and they can support LDCs to design and implement additional actions and strategies that address the complex human capacity and service delivery challenges in a systematic and integrated manner. Structured capacity-focused regional and sub-regional networks and entities will enable countries to enhance capacity development, to develop new approaches for improved service delivery, to build up innovative and urgent training capacities meeting the new demands, and to promote capacity maintenance, addressing the complex causes of capacity erosion. Additional regional cooperation also bears the potential to mitigate the special problems facing landlocked countries with regard to transit rights and infrastructure development.

In response to the capacity challenge posed by AIDS, strategies mitigating the direct impact of the epidemic on human capital must be adopted. By prolonging the productive life of people living with HIV/AIDS, treatment programmes provide a critical contribution to the ability of affected countries to maintain service delivery. An additional benefit is that treatment programmes also contain immense and immediate benefits for the people living with HIV/AIDS by extending their life spans as well as their quality of life. Actions needed to address the direct impact on human resources include re-examining human resource planning models, re-examining the use of establishment registers, looking at governance and organisational structures and seeing how they impede or

facilitate service delivery, and revising of training curricula; e.g. multi-grade teaching can mitigate the impact of AIDS on the education sector. Accounting for brain drain in human resource planning and development is a response to further strengthen countries aiming to overcome capacity challenges.

Scaling up the use of mid-level health cadres, including community health workers and medical assistants, will significantly contribute to capacity in the health sector. Innovative strategies to keep people in their positions and rapidly scale up the number of staff are necessary to secure the future functionality of the health sector in particular. Alternative health cadres have at least two immediate advantages compared to their traditionally educated colleagues. They are less prone to migrate, and their shorter education time span enables LDCs to accelerate human capacity development towards meeting the rapidly increasing needs of this specific sector. Additionally, a number of LDCs have experience with long-term south-south cooperation where medical brigades have successfully supported and trained mid-level personnel. Practical actions include re-examining areas of responsibilities among doctors and nurses and other health cadres, budget support for paying and educating health sector staff, and providing additional incentives through training and responsive management.

Key development sectors should integrate human resource strategies into both their short- and long-term plans and strategies in response to the effects of AIDS. External shocks, diseases such as HIV/AIDS, and other factors affect human resources in key sectors disproportionately, depleting competencies and skills in often-unpredictable ways. Through forward-looking actions, countries will be able to limit the scope of the emerging human and institutional capacity crises and address the crucial issues of poverty and vulnerability. Such strategies will ensure that the sectors most vulnerable to human capacity erosion, such as health, education, and agriculture will be much better equipped to address capacity erosion.

Leaders and policy makers should actively implement existing conventions and policies that support gender equity and equality. Since women and girls bear the brunt of the burden of the epidemic. Responding to the special situation of women and girls with policies that support gender equity and equality will significantly increase and accelerate capacity development. Strategies for global policy can be found in the Beijing Platform for Action (BFPA) and the Convention of the Rights of the Child (CRC) and the Convention on Elimination of All Forms of Discrimination Against Women (CEDAW). A critical step forward is to ratify and implement these conventions and their Optional Protocols by 2006, the mid-term of the BPoA. Important actions include initiatives addressing gender inequality in education, since less educated girls and young women are less able to protect themselves against HIV. One possible policy option is to abolish school fees for affected families or, better yet, for all. This action has proven that it provides considerable mitigation, improving the chances of children, especially girls from AIDS-affected families, to remain in school.

Social protection measures must be widely adopted to assist affected families and households. Capacity depletion through AIDS dramatically affects the capacity of families and households to cope. Securing the human rights, including the right to inherit family property, of women is a clear action that will enhance social protection and significantly benefit women as well as children in affected societies. Abolishing school fees and health care user charges will improve access to education for many poor children and also provide more equitable access to education and health care for many families. These measures will also provide considerable mitigation, improving the chances of children, especially girls, from AIDS-affected families to stay enrolled.

Policy shifts of this nature are entirely consistent with achieving the MDGs and should be factored into the long-term national MGD plans to be developed by 2006. It is essential to mitigate the social and economic impact on the affected households, especially when safety nets are rare. It is also crucial to ensure that orphaned and other vulnerable children, including girls, can continue to attend school and that they are not left to fend for themselves. Families, and especially those taking care of orphaned children, need strategies such as community-based childcare and home visits. Responding to demand, community-based childcare centres are already becoming more common in a number of countries.

Specific human resource strategies for conflict, post-conflict, and other emergency situations have to be adopted in order to address the resultant capacity erosion. Many LDCs are in conflict or in post conflict transitions towards development. To ensure sustainability of capacity development efforts, these must be nested in the local reality. For many LDCs, these situations can provide a much-needed opportunity to re-investigate issues such as inequality in light of post conflict reconstruction and governance, while finding new ways to redress past inequalities.

It is now necessary for the international community to take decisive action to address the multiple capacity challenges facing LDCs. In line with Goal 8 of the MDGs: "Develop a Global Partnership for Development," action to address the capacity challenges impeding achievement of the internationally agreed upon development goals is critical. Only if the LDCs and their development partners immediately pay attention to capacity-focused actions and policies will they be able to facilitate the capacity maintenance and development that is a critical prerequisite for the LDCs to move forward and achieve the goals of the BPoA and the MDGs.

Long-term commitments must be made for capacity development in LDCs, and additional ODA resources earmarked for this purpose.International support for the LDCs should be consistent with the BPoA, which outlines the main priorities, as well as the wider MDGs. Targeted interventions can enable many to break out of the poverty trap. Priorities include: reduce extreme poverty; develop human and institutional resources; remove supply-side constraints and enhance productive capacities; accelerate growth;

secure environmental protection, and attain food security. Integrating and costing human and institutional strategies into development instruments such as National Development Strategies, PRSPs, HIPC documents, which many LDCs undertake to access more international finance, will ensure that the capacity necessary to carry out development matches ODA. For example, countries undertaking review and second generation PRSs in 2005-6 must now align human capacity development requirements with such frameworks. The long-term cost of attaining adequate human resources, necessary for basic service delivery, should be factored into macroeconomic policy planning, economic estimates, and national development plans. In the absence of this commitment, the thorny issue of lack of absorptive capacity cannot be addressed. Much of this is linked to achieving progress on the Paris Declaration on Aid Effectiveness with faster progress on harmonization and more flexibility in aid provision.

In conclusion, LDCs constitute a diverse group of countries hosting 700 million people. However, despite their diversity, they also share a number of important traits, one of which is their vulnerable human and institutional capacities. Clearly, the LDCs and their partners need to take determined action to overcome these vulnerabilities and create a sustainable base for accelerated development, by vigorously pursuing these policy options, significant steps forward in addressing the multiple capacity challenges that LDCs face can be taken to assist in reaching the MDG targets by 2015.

Annex 1: Data Matrix for the Least Developed Countries

Country	HIV Prevalence	HIV Prevalence Grouped in Samples		HIV Prevalence in Young Pregnant Women (15-24) in Capital City	GDP per Capita US $	GDP per Capita Annual Growth Rate (1990-2002)	Life Expectancy at Birth (1970-75)	Life Expectancy at Birth (2002)	Public Health Expenditures (% of GDP)	Sustainable Access to Affordable Essential Drugs (%)	Thousands of People per Doctor 1984	Physicians per 100,000 (1984)	Thousands of People per Nurse 1984	Nurses per 100,000 (1984)	Physicians per 100,000 (1990-2003)	Nurses per 100,000 (1994-1999)	Tuberculosis Cases per 100,000	Net Primary School Enrolment Ratio (%)	Ratio of Female to Male	Adult Literacy Rate	Population in Millions
Afghanistan								43.1								18					22.9
Angola	3.9	1≤HIV<4		166	857	-0.1	38	40.1	2.8	0-49					5	114	398	30			13.2
Bangladesh	0.2	HIV<1		138	351	3.1	45.2	61.1	1.6	50-79	6.7	15	9	11	23	11	447	87	1.02	41.1	143.8
Benin	1.9	1≤HIV<4	2.3	161	411	2.1	44	50.7	2.1	50-79	15.9	6	1.8	56	10	20	131	71	0.48	39.8	6.6
Bhutan				134	695	3.6	43.2	63	3.6	80-94	23.3	4	3	33	5	39	205				2.2
Burkina Faso	4.2	4≤HIV<12	2.3	175	264	1.6	41.2	45.8	1.8	50-79	57.2	2	1.7	59	4	20	272	35	0.65	12.8	12.6
Burundi	6	4≤HIV<12	13.6	173	102	-3.9	43.9	40.8	2.1	0-49	21.1	5	3	33	1		531	53	0.75	50.4	6.6
Cambodia	2.6	1≤HIV<4		130	321	4.1	40.3	57.4	1.8	0-49					16	74	734	86	0.93	69.4	13.8
Cape Verde				105	1,345	3.4	57.5	70	3.8	80-94					17	56	352	101	0.99	75.7	0.5
Central African Republic	13.5	12≤HIV	14	169	274	-0.2	43	39.8	2.3	50-79	23.1	4	2.2	45	4	9	438			48.6	3.8
Chad	4.8	4≤HIV<12	4.8	167	240	-0.5	39	44.7	2	0-49	38.4	3	3.4	29	3	15	388	58	0.31	45.8	8.3
Comoros				136	437	-1.4	48.9	60.6	1.9	80-94					7	34	121	55	0.84	56.2	0.7
Democratic Republic of Congo	4.2	4≤HIV<12		168	111		45.8	41.4	1.5						7	44	594	35	0.58		51.2
Djibouti				154	861	-3.8	41	45.8	4.1	80-94					13	74	1161	34	0.63		0.7
Equatorial Guinea				109	4,394	20.8	40.5	49.1	1.2	0-49					25	40	362	85	0.85		0.5
Eritrea	2.7	1≤HIV<4		156	150	1.5	44.3	52.7	3.7	50-79					5	16	480	43	0.74		4
Ethiopia	6.2	4≤HIV<12	11.7	170	90	2.3	41.8	45.5	1.4	50-79	77.4	1	5.3	19	3		508	46	0.61	41.5	69
Gambia	1.2	1≤HIV<4		155	257	0.0	38	53.9	3.2	80-94					4	13	325	73	0.75		1.4
Guinea	3.2	1≤HIV<4		160	415	1.7	37.3	48.9	1.9	80-94	57.4	2	6.4	16	13	56	375	61	0.38		8.4
Guinea-Bissau				172	141	-2.2	36.5	45.2	3.2	0-49					17	109	316	45			1.4
Haiti	5.6	4≤HIV<12		153	415	-3	48.5	49.4	2.7	0-49	7.2	14	2.3	43	25	11	392			51.9	8.2
Kiribati																236					0.09
Lao People's Democratic Republic	0.1	HIV<1		135	304	3.8	40.4	54.3	1.7	50-79	1.4	71	0.5	200	61	108	359	83	0.92	66.4	5.5
Lesotho	28.9	12≤HIV	27.8	145	402	2.4	49.5	36.6	4.3	80-94	18.6	5			7	60	449	84	1.08	81.4	1.8
Liberia	5.9	4≤HIV<12						41.4			9.2	11	1.4	71		6					3.2
Madagascar	1.7	1≤HIV<4		150	268	-0.9	44.9	53.4	1.3	50-79	10	10			9	22	407	69	1.01		16.9
Malawi	14.2	1 12≤HIV	18	165	177	1.1	41	37.8	2.7	0-49	11.6	9	3.1	32			462	81	0.81	61.8	11.9
Maldives				84	2,182	4.7	51.4	67.2	5.6	50-79					78	113	46	96	1.01	97.2	0.3
Mali	1.9	1≤HIV<4	2.2	174	296	1.7	38.2	48.5	1.7	50-79	25.4	4	1.4	71	4	13	695	38		19	12.6
Mauritania	0.6	HIV<1		152	348	1.6	43.4	52.3	2.6	50-79	12.1	8	1.2	83	14	62	437	67	0.83	41.2	2.8
Mozambique	12.2	12≤HIV	14.7	171	195	4.5	41.1	38.5	4	50-79	38	3	5.8	17	2		547	60	0.69	46.5	18.5
Myanmar	1.2	1≤HIV<4		132		5.7	49.3	57.2	0.4	50-79	3.7	27	0.9	111	30	26	176	82	1	85.3	48.9
Niger				176	190	-0.8	38.2	46	1.4	50-79	38.8	3	0.5	200	3	23	386	34	0.66	17.1	11.5
Nepal	0.3	HIV<1		140	230	2.3	43.3	59.6	1.5	0-49	32.7	3	4.7	21	5	5	271	70	0.88	44	24.6
Rwanda	5.1	4≤HIV<12	11.6	159	212	0.3	44.6	38.9	3.1	0-49	34.7	3	3.7	27	2		598	84		69.2	8.3
Samoa				75	1,484	3.2	56.1	69.8	4.7	95-100					34	155	44	95	0.99	98.7	0.2
Sao Tome and Principe				123	326	-0.4	56.5	69.7	1.5	0-49					47	127	308	98	0.94		0.2
Senegal	0.8	HIV<1	1.1	157	503	1.2	41.8	52.7	2.8	50-79	13.5	7	2.1	48	10	22	438	58		39.3	9.9
Sierra Leone	1.2	1≤HIV<4		177	150	-5.9	35	34.3	2.6	0-49	13.6	7	1.1	90	9	33	628				4.8
Solomon Islands				124	541	-2.4	55.6	69	4.7	80-94					13	119	126				0.5
Somalia								47.9			16.1	6	1.5	66		20					9.5
Sudan	2.3	1≤HIV<4		139	412	3.1	43.6	55.5	0.7	0-49	10.1	10	1.3	77	16	58	346	46	0.83	59.9	32.9
Timor-Leste				158	497		40	49.3	5.8								734				0.7
Togo	4.1	4≤HIV<12	9.1	143	291	-0.7	45.5	49.9	1.4	50-79	8.7	11	1.2	83	6	30	688	95	0.84	59.6	4.8
Tuvalu																300					0.01
Uganda	4.1	4≤HIV<12	10	146	236	3.9	46.3	45.7	3.4	50-79	21.9	5	2.1	48	5	19	550			68.9	25
United Republic of Tanzania	8.8	4≤HIV<12	7	162	267	0.7	46.5	43.5	2.1	50-79					4	85	472	54		77.1	36.3
Vanuatu				129	1,138	-0.1	54	68.6	2.3						12	260	147	93	1.02		0.2
Yemen	0.1	HIV<1		149	537	2.5	39.8	59.8	1.6	50-79					22	51	145	67	0.66	49	19.3
Zambia	16.5	1 12≤HIV	22.1	164	361	-1.2	49.7	32.7	3	50-79	7.1	14	0.7	143	7	113	588	66	0.85	79.9	10.7
	HDR 2004	Based on HDR 2004		UNAIDS web site	HDR 2004	HDR 2004	HDR 2004	HDR 2004	HDR 2004	HDR 2004	HDR 2004	HDR 1990	Calculated on basis of HDR 1990	HDR 2004	WHO web site (years 1994-1999)	HDR 2004	HDR 2004	HDR 2004	HDR 2004	HDR 2004	HDR 2004

Annex 2: Global Fund Data

	(1) LDC Country	(2) Program(s) Approved for Funding	(3) Total Funds Approved (in US $)	(4) Funds Committed by Grant Agreements (in US $)	(5) Funds Disbursed at 31 Dec 2004 (in US $)	(6) Local Fund Agent	(7) Principal Recipient(s)	(8) Round(s) Approved
1	Afghanistan	HIV/AIDS, Malaria, TB	5,469,995	3,125,605	1,687,514	Price Waterhouse Coopers	Ministry of Health and TBC	2, 4
2	Angola	HIV/AIDS, Malaria, TB	60,280,400			TBC	TBC	3, 4
3	Bangladesh	HIV/AIDS, TB	22,653,213	22,653,214	9,349,622	DTT Emerging Markets Advancement Committee(BRAC), Ministry of Finance	Bangladesh Rural	2, 3
4	Benin	HIV/AIDS, Malaria, TB	17,294,520	17,294,520	9,929,522	Price Waterhouse Coopers	Africare and UNDP	1, 2, 3
5	Bhutan	Malaria and TB	1,561,525			TBC	TBC	4
6	Burkina Faso	HIV/AIDS, Malaria, TB	22,135,793	22,135,783	7,522,237	Chemonics	UNDP	2, 4
7	Burundi	HIV/AIDS, Malaria, TB	20,556,301	18,669,126	10,459,514	Price Waterhouse Coopers Ministry of Health, TBC	National Aids Council,	1, 2, 4
8	Cambodia	HIV/AIDS, Malaria, TB	38,147,845	24,131,619	12,003,743	KPMG	Ministry of Health and	TBC
9	Cape Verde	na						
10	Central African Rep.	HIV/AIDS, Malaria, TB	25,520,634	14,927,818	6,782,857	Price Waterhouse Coopers	UNDP and TBC	2, 4
11	Chad	HIV/AIDS, TB	8,644,119	8,644,119	1,580,169	Swiss Tropical Institute	Fonds de Soutien aux Activités en matière de Population	2, 3
12	Comoros	HIV/AIDS, Malaria, TB	2,220,231	2,220,231	1,019,768	Price Waterhouse Coopers	ASCOBEF, Association Communautaire pour le Bien-être de la Famille	2, 3
13	Congo, Dem. Rep.	HIV/AIDS, Malaria, TB	66,175,203	66,175,203	10,468,928	Price Waterhouse Coopers	UNDP	2, 3
14	Djibouti	HIV/AIDS	7,271,400			TBC	TBC	4
15	Equatorial Guinea	HIV/AIDS	4,402,427			TBC	TBC	4
16	Eritrea	HIV/AIDS, Malaria	10,742,543	10,742,543	4,811,220	KPMG	Ministry of Health	2, 3
17	Ethiopia	HIV/AIDS, Malaria, TB	149,350,582	104,261,422	45,739,466	KPMG	Fe Ministry of Health, HIV/AIDS Control, TBC	1,2, 4
18	Gambia	HIV/AIDS, Malaria	11,907,243	11,907,243	723,624	Price Waterhouse Coopers	Dept of State for Health and National AIDS Secretariat	3
19	Guinea	HIV/AIDS, Malaria	11,698,205	11,698,205	2,784,814	Price Waterhouse Coopers	Ministry of Public Health	2
20	Guinea-Bissau	HIV/AIDS, Malaria, TB	4,556,179	4,556,179	808,095	Price Waterhouse Coopers	UNDP	3, 4
21	Haiti	HIV/AIDS, Malaria, TB	40,222,156	40,222,156	29,136,244	KPMG	Foundation SOGEBANK and UNDP	1, 3
22	Kiribati*							
23	Lao D.R.	HIV/AIDS, Malaria, TB	13,470,615	5,987,15	4 ,665,882	KPMG	The Ministry of Health and TBC	1, 2, 4
24	Lesotho	HIV/AIDS, TB	12,557,000	12,557,000	5,365,581	Price Waterhouse Coopers	Ministry of Finance and Dev Planning	2
25	Liberia	HIV/AIDS, Malaria, TB	24,333,125	24,333,125	5,061,000	Price Waterhouse Coopers	UNDP	2, 3
26	Madagascar	HIV/AIDS, Malaria, TB	47,463,190	28,159,130	14,617,790	Price Waterhouse Coopers	CRSPop Services International Executive Committee National de Lutte Contre le VIH/SIDA, UGP-CRESAN, and TBC	1, 2, 3, 4

	(1) LDC Country	(2) Program(s) Approved for Funding	(3) Total Funds Approved (in US $)	(4) Funds Committed by Grant Agreements (in US $)	(5) Funds Disbursed at 31 Dec 2004 (in US $)	(6) Local Fund Agent	(7) Principal Recipient(s)	(8) Round(s) Approved
27	Malawi	HIV/AIDS, Malaria	62,623,500	41,751,500	26,253,844	Price Waterhouse Coopers	Registered Trustees of NAC Trust and TBC	1, 2
28	Maldives							
29	Mali	HIV/AIDS, Malaria, TB	28,249,252	2,023,424	945,120	KPMG	Ministry of Health and TBC	1, 4
30	Mauritania	Malaria, TB	1,928,786	1,928,786	959,591	Price Waterhouse Coopers	UNDP	2
31	Mozambique	HIV/AIDS, Malaria, TB	51,112,173	51,112,173	16,384,567	DTT Emerging Markets	Ministry of Health and National Aids Council (CNCS)	2
32	Myanmar	HIV/AIDS, Malaria, TB	35,680,724	6,997,137	2,404,656	KPMG	UNDP and TBC	2, 3
33	Nepal	HIV/AIDS, Malaria, TB	10,343,005	6,988,925	948,513	Price Waterhouse Coopers	Ministry of Health and TBC	2, 4
34	Niger	HIV/AIDS, Malaria	24,548,394	13,290,406	5,104,204	Swiss Tropical Institut	CCISD, National Coordination Committee and TBC	3, 4
35	Rwanda	HIV/AIDS, Malaria, TB	42,261,643	42,261,643	23,111,551	Crown Agents	Ministry of Health	1, 3, 4
36	Samoa*							
37	Sao Tome & Principe	Malaria	1,941,359			TBC	TBC	4
38	Senegal	HIV/AIDS, Malaria	34,030,997	10,285,714	4,669,629	KPMG	Ministry of Health, National AIDS Council	1, 4
39	Sierra Leone	HIV/AIDS, Malaria, TB	23,240,195	2,569,103	1,800,067	Price Waterhouse Coopers	Sierra Leone Red Cross Society and TBC	2, 4
40	Solomon Islands*							
41	Somalia	HIV/AIDS, Malaria, TB	24,496,356	14,491,712	6,951,128	Price Waterhouse Coopers	UNICEF, World Vision and TBC	2, 3, 4
42	Sudan	HIV/AIDS, Malaria, TB	49,595,585	18,698,422	6,969,278	KPMG	UNDP and TBC	2, 3, 4
43a	Tanzania	HIV/AIDS, Malaria, TB	198,703,195	41,310,110	14,468,386	Ministry	Ministry of Health/Finance	1, 3, 4
43b	Tanzania Zanzibar	HIV/AIDS, Malaria, TB	7,946,063	7,946,063	4,955,405	Price Waterhouse Coopers	Ministry of Health and Zanzibar AIDS Comm	1, 2 3, 4
44	Timor-Leste							
45	Togo	HIV/AIDS, Malaria, TB	37,762,054	19,417,956	11,062,168	Price Waterhouse Coopers	UNDP and TBC	2, 3, 4
46	Tuvalu*							4
47	Uganda	HIV/AIDS, Malaria, TB	201,007,993	134,575,845	37,965,273	Price Waterhouse Coopers	Ministry of Finanncce and Planning and Econ Dev and TBC48	1, 2 3, 4
48	Vanuatu*							
49	Yemen	HIV/AIDS, Malaria, TB	12,239,211	4,159,632	1,661,532	KPMG	National Malaria Programme, Ministry of Public Health/Pop and TBC	
50	Zambia	HIV/AIDS, Malaria, TB	121,995,782	74,945,056	52,896,603	Price Waterhouse Coopers	Central Board of health, Zambia Churches Health Assoc, National AIDS Network and TBC	1, 4
	TOTAL		**1,598,340,711**	**949,155,002**	**406,029,105**			
	*Multi-country Western Pacific	HIV/AIDS, Malaria, TB	7,151,950	7,151,950	5,392,219	KPMG	Secretariat of the Pacific Community	2

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"AIDS is a new threat that terrorizes all humanity. All sections of society are victims of AIDS. No one is spared: workers, bureaucrats, men, women, youth (the life-force of society), teachers and even doctors. People need to know about AIDS. Everyone must play their part: teachers, college professors, and all citizens. Speak about AIDS in the mosques, in synagogues, in churches. Time is of the essence. Each day, countless people die of AIDS. As we wait for a cure, we must all work together, urgently, to prevent the spread of this epidemic."

From "*SIDA*," a song by Luambo Makiadi (popularly known as Franco).
He is a famous musician/composer from the Democratic Republic of Congo.

"Equality: Empowering women to break the vicious cycle of gender disparities contributing to the spread of HIV/AIDS will stop women from falling behind."

Least Developed Countries

- Afghanistan
- Angola
- Bangladesh
- Benin
- Bhutan
- Burkina Faso
- Burundi
- Cambodia
- Cape Verde
- Central African Republic
- Chad
- Comoros
- Democratic Republic of the Congo
- Djibouti
- Equatorial Guinea
- Eritrea
- Ethiopia
- Gambia
- Guinea
- Guinea-Bissau
- Haiti
- Kiribati
- Lao People's Democratic Republic
- Lesotho
- Liberia
- Madagascar
- Malawi
- Maldives
- Mali
- Mauritania
- Mozambique
- Myanmar
- Nepal
- Niger
- Rwanda
- Samoa
- Sâo Tomé and Principe
- Senegal
- Sierra Leone
- Solomon Islands
- Somalia
- Sudan
- Timor-Lesté
- Togo
- Tuvalu
- Uganda
- United Republic of Tanzania
- Vanuatu
- Yemen
- Zambia

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