

## EXECUTIVE SUMMARY

HIV/AIDS is the deadliest epidemic of our time. Over 22 million people have already lost their lives, and more than 42 million are currently living with HIV/AIDS. Even if a vaccine for HIV were discovered today, over 40 million people would still die prematurely as a result of AIDS. In many countries, especially in Africa and the hardest-hit countries such as Botswana, Swaziland and Zimbabwe, the AIDS epidemic has spread rapidly, leaving illness, death, poverty and misery in its wake. In other countries the disease is still in its early stages. Notably, HIV/AIDS has now taken hold in the most populous countries of the world—the number of people infected with HIV has reached one million in China and six million in India; the destructive effects of the epidemic are already beginning to be felt in those countries.

The epidemic has not only killed people; it has imposed a heavy burden on families, communities and economies. The misery and devastation already caused by HIV/AIDS is enormous, but it is likely that the future impact will be even greater, as the list of significantly affected countries continues to grow. It is difficult to predict with certainty the future course of the epidemic. Much depends on:

- Educating people about the dangers of the virus and persuading them to change their behaviour
- Finding effective ways to prevent the virus from spreading further
- Discovering new medicines and treatments
- Mobilizing the financial and human resources necessary for accomplishing these tasks

Soon after the onset of the epidemic, the Department of Economic and Social Affairs' Population Division began to study the demography of HIV/AIDS and incorporated the impact of HIV/AIDS into the biennial revisions of the official United Nations world population estimates and projections<sup>1</sup>. The present report goes further, to consider the broader impacts of HIV/AIDS on development. The report provides input for the thirty-eighth session of the Commission on Population and Development, meeting in 2005, whose theme will be "Population, development and HIV/AIDS, with special emphasis on poverty". It also provides an overview of the full spectrum of consequences of the AIDS epidemic for the General Assembly's review in 2005 of the implementation of the United Nations Declaration of Commitment on HIV/AIDS, which was adopted in 2001 (A/RES/S-26/2).

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<sup>1</sup> *World Population Prospects: The 2002 Revision* (United Nations, Department of Economic and Social Affairs, Population Division publication, Sales No. E.03.XIII.6).

In addition to analysing the demographic impact of HIV/AIDS, *The Impact of AIDS* highlights the impact of HIV/AIDS on families and households, and on agricultural sustainability, business, the health sector, education and national economic growth. The HIV/AIDS epidemic has erased decades of progress in combating mortality and has seriously compromised the living conditions of current and future generations. The disease has such a staggering impact because it weakens and kills many people in their young adulthood, the most productive years for income generation and family caregiving. It destroys families, eliminating a whole generation crucial for the survival of the younger and older persons in society.

#### *The demographic impact of HIV/AIDS*

HIV/AIDS has already had a devastating demographic impact, especially in sub-Saharan Africa. The epidemic has resulted in terrible losses of life and population. Recent United Nations population projections show even more drastic losses over the coming decades.

*World Population Prospects: The 2002 Revision*, the United Nations official world population estimates and projections, incorporated the effects of HIV/AIDS for the 53 hardest-hit countries. Those 53 countries are home to over 90 per cent of the adults living with HIV. The annual number of excess deaths in the 53 countries had reached one million by the early 1990s, 3 million by 2000 and over 4 million by 2003.

Thirty-eight of the 53 countries—three out of every four—are located in sub-Saharan Africa. About 100 million additional deaths are expected in those African countries by 2025 as a result of the HIV epidemic. By 2025, those countries will have 14 per cent fewer inhabitants than they would have had in the absence of AIDS.

Although the demographic effects of HIV/AIDS in countries outside Africa are relatively moderate and prevalence rates are lower, the human losses are still enormous. Prior to 2025, AIDS is expected to cause 31 million additional deaths in India and 18 million more deaths in China.

Mortality has surged in countries with high HIV prevalence rates, rising within a decade to levels not seen since the 1950s or 1960s. In the 38 most affected African countries, nearly ten years of life expectancy will have been lost by 2020-2025, and in the seven highest-prevalence countries, nearly 30 years will have been lost. Outside Africa, countries projected to experience a significant reduction of life expectancy include the Bahamas, Cambodia, the Dominican Republic, Haiti and Myanmar.

Botswana currently has the highest HIV prevalence rate in the world: more than one in every three adults is HIV-positive. Life expectancy had reached 65 years in 1990-1995, but it dropped to 56 years by 1995-2000 and is currently around 40 years as a result of deaths related to AIDS. The population

will likely begin to decline within a few years. Although the full economic impact of HIV/AIDS is still to come, population projections for Botswana show a severe deficit of working-age people by 2025.

#### *The impact of HIV/AIDS on households and families*

Households feel the immediate impact of the HIV/AIDS epidemic. Indeed, households and families bear most of the burden since they are the primary units for coping with the disease and its consequences. Families in which the infected person is the breadwinner suffer financially, both from the loss of earnings and the increased expenditure for medical care. During the long period of illness, the loss of income and the cost of caring for a family member impoverish households. Studies document reduced levels of household consumption, including a reduction in food consumption, resulting in malnutrition. The HIV/AIDS epidemic poses additional challenges in places where the disease carries a heavy social stigma.

As HIV infection is most common among young adults, a significant part of the generation of young parents is lost, and family composition undergoes rapid changes. Severely affected countries show increases in the percentage of female-headed households and grandparent-headed households, as well as households headed by young orphans. When a family member dies, the household may be dissolved altogether, and the children may be sent to live with relatives or even left on their own.

The death of a spouse has an especially severe impact in societies with a marked gender division of labour since the surviving spouse cannot take on the work or responsibilities of the ill or deceased family member. In the Rakai district of Uganda, for example, AIDS deaths caused labour shortages for both farm and domestic work.

By 2001, 14 million children under age 15 had already lost one or both parents to HIV/AIDS. Eleven million of those children live in sub-Saharan Africa. The numbers will probably double by 2010. It is common for relatives to take orphans into their own homes, especially in African societies, but the rapid rise in the number of orphans would overwhelm the traditional support system of the extended family. Many of the households fostering orphans are themselves poor, and taking in orphaned children represents a significant burden.

#### *The impact of HIV/AIDS on firms*

The disease affects business enterprises in both the agricultural and non-agricultural sectors. Available studies on the impact of HIV/AIDS point to impacts on the size and quality of the labour force and on labour costs, as the most productive workers become too ill to work effectively, or to work at all, and eventually die. The loss of workers from AIDS and the cost of providing health care benefits and death benefits have had serious effects on employers.

The impact on firms depends primarily on five factors: the number of employees infected; their role in the company; the structure of the production process and its ability to cope with the loss of employees; the health-care benefits provided by the company; and the effect of HIV/AIDS on the business environment. During the early stages of the disease, workers can often continue to work but take more sick days and leave time. Companies that provide health-care benefits for workers and their families may not be able to meet the costs of health care and the expensive drugs used to treat HIV/AIDS. A study in Malawi found, for instance, that worker deaths in one company increased more than 40 per cent over a five-year period, resulting in the payment of substantially higher death benefits.

Young adults in their prime working years are most likely to contract HIV, and younger workers are disproportionately more likely to die of AIDS. Depending on the positions held by infected workers, production and management suffer. Workers with exceptional skills and longer experience are hardest to replace. At the same time, demand for goods and services may decline since afflicted households have less income and lower consumption levels.

#### *The impact of HIV/AIDS on agriculture*

HIV/AIDS is having a crushing effect on agricultural production and the economic viability of small farms and commercial agricultural enterprises. The Food and Agriculture Organization of the United Nations (FAO) has found that in the 10 African countries most severely affected by HIV/AIDS, the agricultural labour force will decline between 10 and 26 per cent by 2020. Botswana, Mozambique, Namibia and Zimbabwe are each expected to lose at least one fifth of their agricultural workers.

Among the consequences of the loss of farm workers are the reduction in land under cultivation, the shift to crops that require less labour, a decline in crop yields and a shortage of labour during periods of high labour demand. The epidemic also leads to a loss of knowledge about farming methods and a reduction in skilled and experienced labour. A survey in Zimbabwe found that agricultural output declined by nearly 50 per cent among households affected by AIDS. Another study focused on the commercial agricultural sector of Kenya; it reported that AIDS-related morbidity and mortality had already imposed profound financial, economic and social costs.

#### *The impact of HIV/AIDS on health systems*

Health-care systems were already inadequate in many of the highly impacted countries even before HIV/AIDS struck. The HIV/AIDS epidemic has made enormous additional demands on those systems, straining health budgets and health insurance schemes. At the same time, health-care workers are also falling ill and dying. Thus, the supply of available health services is being depleted while the demand is increasing.

Expenditures have been rising for the treatment of AIDS and the opportunistic infections that are common in persons whose immune systems have been compromised by HIV/AIDS. The allocation of scarce resources for treating HIV/AIDS has meant that other health concerns receive less attention. As Governments become increasingly hard-pressed in the face of the AIDS epidemic to provide health care through the public sector, health care costs must increasingly be borne by the private sector and by households and individuals.

#### *The impact of HIV/AIDS on education*

HIV/AIDS is eroding the gains that have been made towards achieving universal primary education. AIDS weakens educational systems and hampers children's school attendance. In the long run, the AIDS epidemic may lead to a decline in the level and quality of education, diminishing human capital and delaying social and economic development.

Studies have found a high rate of HIV infection among teachers and school administrators, affecting both the amount and quality of educational resources. Trained, experienced teachers are difficult to replace. A study by the United Nations Children's Fund (UNICEF) estimated that the number of teachers' deaths in Zambia in 1998 was equivalent to the loss of about two thirds of the annual output of newly trained teachers. Experienced teachers are, by necessity, replaced by less experienced teachers; the quality of education consequently declines. Quality is also compromised when the absenteeism of teachers disrupts the learning process of their students.

At the same time, studies show that children in families with an infected member are less likely to remain in school. Those children are needed at home to help in the house or to work. Less affluent families are unable to afford school fees. A study in a highly infected district of Uganda found that total enrolments in three primary schools experienced a 60 per cent drop from 1989 to 1993. Orphans who have lost both parents are also much less likely than other children to be in school. A household survey in Kampala, Uganda, reported that in 1990, 47 per cent of households with orphans did not have enough money to send their children to school, as compared with 10 per cent of other households.

#### *The impact of HIV/AIDS on economic growth*

The HIV/AIDS epidemic burdens the economy of any country. This is especially true for the weak economies that are generally characteristic of countries with high levels of HIV prevalence. In many of the highly affected countries, studies have been undertaken to model the impact of HIV/AIDS on economic growth. In some cases, estimates of the economic impact of HIV/AIDS have been "small". In other cases, annual reductions of from 2 to 4 percentage points of gross domestic product per year have been found, compared to a hypothetical "no-AIDS" situation. Beyond its effects on gross

domestic product, the HIV/AIDS epidemic is likely to exacerbate income inequality and increase poverty.

The longer-term impact of HIV/AIDS on welfare and development is certainly more serious than the economic analyses suggest. Estimates of AIDS' impacts on economic performance usually do not take into account the loss of "social capital" or of the long-term damage accruing to human capital, as children's education, nutrition and health suffer directly and indirectly as a consequence of HIV/AIDS. The effects of lowered investment in the human capital of the younger generation will affect economic performance for decades to come, well beyond the time frame of most economic analyses.

### *Conclusions*

By its resolution 26-S/2 (annex), the General Assembly, at its twenty-sixth special session, held in New York from 25 to 27 June 2001, adopted the Declaration of Commitment on HIV/AIDS. The Declaration states that "the global HIV/AIDS epidemic, through its devastating scale and impact, constitutes a global emergency and one of the most formidable challenges to human life and dignity, as well as to the effective enjoyment of human rights, which undermines social and economic development throughout the world and affects all levels of society—national, community, family and individual".

Since the adoption of the Declaration of Commitment, the HIV/AIDS epidemic has worsened and become more widespread. The report of the Secretary-General to the fifty-eighth session of the General Assembly on progress towards implementation of the Declaration of Commitment on HIV/AIDS emphasizes that assertive political leadership and effective action are required to prevent a major expansion of HIV/AIDS. The report recommends that all countries develop and implement national strategies to promote the delivery of comprehensive prevention, treatment, care and support to those people living with or affected by HIV/AIDS.

In order to conquer HIV/AIDS, considerably greater efforts and resources will be required. As the Secretary-General concluded in his report, "to finance the global response, ...annual funding for HIV/AIDS programmes must increase threefold over current levels by 2005, and fivefold by 2007".

The course of the HIV/AIDS epidemic is by no means predetermined. The eventual course of the disease depends on how individuals, communities, nations and the world respond to the HIV/AIDS threat today and tomorrow.