## **ILOAIDS**

# Mozambique: HIV/AIDS, work and development



#### Acknowledgements

We would like to thank the following institutions and individuals for their valuable contribution to this report: the Ministry of Labour, Maputo, and employers' and workers' organizations in Mozambique for their support for carrying out the field research; Christiane Fiorito, from GTZ Mozambique, and Claudia Kessler, from the Swiss Tropical Institute, for their useful comments on the text; and the ILO/AIDS office in Geneva—in particular, Mr Franklyn Lisk— for their continuous support.

The report was developed with the technical cooperation of ILO/AIDS and GTZ (*Deutsche Gesellschaft für Technische Zusammenarbeit*). It was prepared by Dr Sabine Beckmann, Senior Technical Specialist, and Pallavi Rai, Technical Officer for the ILO Programme on HIV/AIDS and the World of Work.

Published by:

ILO/AIDS, ILO Programme on HIV/AIDS and the World of Work International Labour Office 4 route des Morillons CH-1211 Geneva 22 Switzerland

Website: www.ilo.org/aids

#### **ILO/AIDS**

#### **Acronyms**

ACCA AIDS Control for Companies in Africa

ACIS Associação Commercial e Industrial de Sofala

AFL-CIO American Federation of Labour—Congress of Industrial Organizations

AIDS Acquired immunodeficiency syndrome

AMIMO Organização dos mineiros moçambicanos (the Association of Mozambican

Miners

AMODEFA The Mozambican Association for the Development of the Family

CBO Community-based organization

CONSILMO The Free and Independent Trade Unions Council of Mozambique

CNCS Conselho Nacional de Combate ao HIV/SIDA

CTA Confederação de Associações economicas de Moçambique
DfID Department for International Development (of the United Kingdom)

FAO Food and Agriculture Organization of the United Nations FDC Fundação para o desenvolvimento da comunidade GFATM Global Fund to Fight AIDS, Tuberculosis and Malaria

GDP Gross domestic product

GTZ Deutsche Gesellschaft Technische für Zusammenarbeit (German Technical

Cooperation)

HDI Human Development Index HIV Human immunodeficiency virus

IAP Instituto Aperfeiçoamento Pedagógico (Institute for the Improvement of

Teachers)

INDE Instituto Nacional de Desinvolvimento de Educação (National Institute for

Educational Development)

ILO International Labour Organization IMF International Monetary Fund

MAP the Multi-Country HIV/AIDS Program (MAP) for Africa MONASO Mozambique Network of AIDS Service Organizations

MINED Ministry of Education MISAU Ministry of Health

MTCT Mother-to-child transmission NAC National AIDS Council

NACP National AIDS Control Programme NGOs Non-governmental organizations

NSP National Strategic Plan

NUM National Union of Mineworkers
OTM-CS Mozambican Workers' Organization
PALOP Portuguese-speaking African countries
ROCS Roads and Coastal Shipping Project

SAT Southern African AIDS Training Programme

STI Sexually transmitted infection

TEBA The Employment Bureau of Africa

UNAIDS Joint United Nations Programme on HIV/AIDS

UNFPA United Nations Population Fund

UNDP United Nations Development Programme

UNICEF United Nations Children's Fund

USAID US Agency for International Development

VCT Voluntary counselling and testing

#### **Contents**

#### **Executive summary**

#### A. Situation analysis

- 1. Recent economic trends and labour market situation
- 2. Trends in HIV/AIDS prevalence
  - i. Characteristics of the epidemic
  - ii. Factors contributing to the spread of the infection

#### 3. Demography

- i. Trends in population structure
- ii. Impact on the labour force

#### B. Economic impact of HIV/AIDS

#### 1. Macroeconomic impact

- i. Impact on the national budget
- ii. Gross domestic product
- iii. Poverty

#### 2. Impact on specific economic sectors

- i. Transport
- ii. Mining
- iii. Agriculture
- iv. Health care
- v. Education

#### 3. Microeconomic impact

- i. Enterprises
- ii. Households

#### C. Policy options

#### 1. Response to the HIV/AIDS epidemic

- i. National response
- ii. International response
- iii. ILO projects in the workplace

#### D. Recommendations

#### **Background literature**

#### **Executive summary**

This paper is the fourth in a series of studies examining the impact of HIV/AIDS at the country level. It examines the demographic and socio-economic impact of HIV/AIDS in Mozambique, as well as the effect of HIV/AIDS on labour supply and demand in key skills, in order to evaluate the impact on human development and economic growth. In addition, it explores the policy implications of the epidemic and provides recommendations for intervention by the ILO and its tripartite partners.

Section A looks at the recent economic and labour market situation and analyses the current epidemiological trends. It analyses the estimates of the epidemic and its impact on demography and labour market, in addition to investigating certain behavioural and socio-economic factors that have played a role in the rapid spread of HIV. Trends in dependency ratios and life expectancy, as well as age-specific impacts on the population as a result of HIV/AIDS, are assessed.

Section B analyses the impact on key economic variables and specific sectors. The macroeconomic impacts of HIV/AIDS, such as its impact on GDP growth and output, are difficult to measure. But there is clear evidence from various sectors, such as education, mining and health, that the population is severely affected by the epidemic. In fact, given the historical context of Mozambique, HIV/AIDS is seriously threatening crucial sectors such as mining, education and transport, and decades of investment in human capital formation are bound to be reversed, as a result. This, in turn, affects the public revenue basis and reduces public expenditure on health and education. As a result, infection rates increase, thus creating a vicious circle. Evidence suggests that businesses have become aware of the number of employees infected with HIV. But very few have committed themselves to implementing workplace programmes on HIV prevention and care in their workplace.

The impact on households is explored at several levels and is seen in the context of the country's devastation by floods in 2000 and 2001. This stretched the capacity of households to survive. The rapidly growing numbers of orphans who have lost their parent(s) to AIDS inevitably turn to their friends or relatives for help. This places an additional burden on overextended households, making it impossible for them to survive the strain. This, in turn, results in innumerable child-headed households and orphans who have no one to care for them.

Section C looks at the national response and provides recommendations for ILO/AIDS-assisted programmes and activities. Section D demonstrates the need for an HIV/AIDS response to be multisectoral and to include implementation of effective prevention programmes at the national and district level. Special emphasis is placed on the education and health sectors, given the long-standing scarcity of human resources in the country. A framework for a workplace response to HIV/AIDS is also outlined, involving employers' organizations and labour unions in workplace programmes, training and other activities. The proposed starting point would be an assessment of changes in the availability of key skills and occupations that have taken place or can be projected. A review of training capacity relative to the needs of specific sectors is also recommended. This information would be useful when estimating labour supply and demand at the national level. In order to meet the national objectives, key labour potential must be maintained (such as provision of health-care services, education etc). Moreover, since the majority of the population works in the informal sector, any kind of intervention will need to address this sector as well.

#### A. Situation analysis

#### 1. Recent economic trends and labour market situation

Mozambique was under Portuguese colonial rule for 400 years until 1975, after which the country experienced deepening internal political divisions and was engaged in civil war for 10 years. This resulted in a devastated countryside and infrastructure, and the displacement of millions of rural-dwelling people. Human resources were depleted and, after independence, there were only 40 doctors left in the whole country. Stability could only be restored after the UN-negotiated peace agreement with rebel forces in 1992 and, more specifically, after the first democratic elections in 1994.

Macroeconomic reforms, combined with donor assistance, then led to dramatic improvements in the country's growth rate. In terms of GDP per capita, Mozambique was the poorest country in the world during the mid-1990s. Estimated GDP per capita in 1998 was US\$140 (World Bank, 1999). The current illiteracy rate is estimated at 50%, with women accounting for 71%. Heavy floods in 1999 and 2000 severely damaged the economy and the country has also been affected by the serious drought that affected Southern Africa in recent years. Mozambique's natural resource base has enormous potential but remains vastly under-utilized. Only about 10% of arable agricultural land is used, although more than 75% of the population derive their principal livelihood from this sector, primarily as smallholder farmers.

Since the signing of the peace accord, economic growth has been steady, averaging 10% annually over the period 1996–1999. In 1997, it peaked at 12.4%. (However, in 2000, the GDP growth rate was temporarily reduced due to the floods). At present, the economic outlook is quite favourable and the country's real GDP growth is expected to remain high, based on the annual average of 8–9% for 2002 and 2003. Its once substantial foreign debt has been considerably reduced. This favourable macroeconomic situation has been fuelled by a strong performance across sectors—above all, in manufacturing, construction and services. Agricultural output, which accounts for approximately 27% of GDP, has kept pace with overall economic growth. The main subsistence crop is cassava, while the main exports are cotton, cashew nuts, shrimps and prawns.

In spite of these gains, several factors have hindered the country's development. A large proportion of whites living in Mozambique emigrated, and the country was left without sufficient skilled human recourses to guarantee basic services to its citizens. Economically speaking, Mozambique is dependent on South Africa, and the aftermath of severe drought and prolonged civil war is evident. Furthermore, HIV/AIDS poses one of the greatest threats to the development of the country. There has been a steep increase in the number of AIDS-related deaths and illnesses since the civil war, probably due to a higher mobility of the population. This has resulted in lower life expectancy, higher infant mortality, lower population and growth rates, and greater changes in the distribution of population by age and sex than would otherwise be expected in the absence of HIV.

The adoption of a National Strategic Plan (NSP) for 2001–2003 was an important step in underlining the government's commitment to respond to HIV/AIDS. Efforts in 2002–2003 have concentrated on the creation of a policy and institutional framework for implementation of the NSP. However, the capacity to respond effectively to the epidemic is hindered by the lack of adequate human, technical and institutional capacities and a lack of physical infrastructure, especially in the health and education sectors.

At the macro level, AIDS affects the environment in which businesses operate, including markets, investment, services and education. Interviews with the trade union representatives and the employers' representatives in Mozambique revealed that they are aware that, today, no business is immune to AIDS. They also recognize that the private sector is in a unique position to respond to the epidemic, because of its contacts with employees and the wider business community, and the wealth of experience and skills that it has accumulated. There is much that businesses can do, and the benefits of action go well beyond the workplace. However, these organizations are cash-strapped and are currently preparing proposals to obtain funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria.

#### 2. HIV/AIDS in Mozambique

#### i. Characteristics of the epidemic

With a population of 18.6 million, and an estimated 13% adult HIV prevalence rate, Mozambique has more than 1 million people currently living with HIV/AIDS (UNAIDS). **About 16% of all Mozambicans in the 15–49-year-old age group were HIV-positive in their productive prime as of the year 2000.** Some 100,000 Mozambicans are estimated to have already died of AIDS since HIV was first detected in the country in 1986. The majority of AIDS-related deaths have occurred in the last few years. Based on current trends, it is estimated that, by 2010, 1.7 million Mozambicans will have died of AIDS-related diseases.

The national prevalence rates mask considerable regional differences. Mozambique consists of three regions—southern, central and northern—with the central region having the most severe epidemic of HIV. A look at the prevalence rates across the three regions shows that relatively low prevalence rates (about 6%) in some populous northern provinces bring down the national average (see Table 1). Rates in the central provinces, however, are at around 20%. In the economically more productive southern parts of the country, prevalence is about 13%.

	Table 1. HIV/AIDS prevalence rates by region									
Region	Province	Provincial rate	Regional rate							
South	Maputo city	13%	13.2%							
	Maputo province	14.3%								
	Gaza	16%								
	Inhambane	9.6%								
	Sofala	18.7%								
Centre	Manica	21.1%	16.5%							
	Tete	19.8%								
	Zambezia	12.7%								
North	Nampula	5.2%	5.7%							
	Niassa	6.8%								
	Cabo Delgado	6.4%								
	Mozambique	12.2%								
	(national)									

Source: Ministry of Health, 2001

The overall rate of HIV infection among girls and young women is estimated at 15%, which is twice that of their male counterparts. This is because nearly 60% of girls are married by the age

of 18 (and thus sexually active), often to much older, sexually experienced men who may expose them to HIV and other sexually transmitted infections (STIs).

#### ii. Factors contributing to the spread of the infection

As in other African countries, the most common mode of HIV transmission in Mozambique is through heterosexual relations, although mother-to-child transmission accounts for 25% of all diagnosed cases—higher than elsewhere in Southern Africa. (The reasons for this are unclear, although higher fertility rates and the fact that children are more likely to be taken to health centres for treatment may be significant factors<sup>1</sup>.)

In terms of risk groups, most infections are concentrated along transportation and commercial routes. Mobile populations (i.e., miners, migrant workers, traders, drivers and personnel of uniformed services) and their partners are disproportionately affected. Also, despite significant social and economic progress since the end of the war, persistent poverty, high levels of illiteracy, and dynamic rural-urban and cross-border movements have exacerbated the rapid spread of HIV.

The epidemic has been fuelled by the return of refugees from neighbouring countries, the introduction of peacekeeping forces from high-prevalence countries, and a marked increase in cross-border trade. The impact of the movement of troops from West Africa is thought to be part of the cause of the spread of HIV-2 in Mozambique, as military personnel have higher prevalence rates and tend to exhibit risky behaviour<sup>2</sup>. The railway line that passes by Gaza links Mozambique with South Africa and Zimbabwe. During the war in the 1980s, the trains transporting relief food were guarded by soldiers from the latter countries. As a result of the dire conditions, prostitution increased in that region. In southern Mozambique, miners with relatively high wages meet the staggering poverty of rural women struggling to make a living. This combination of poverty and inequality greatly favours the spread of HIV.

Migration is one of the key determinants of the Mozambican HIV/AIDS epidemic. Mozambique was at war in the 1980s, and refugees from the central region fled to neighbouring countries, including Malawi and Zimbabwe, where infection rates were already very high by 1990. According to the health ministry, the virus came to the central region with the approximately 1.5 million refugees who returned home in the early 1990s. It is also likely that high HIV rates among Zimbabwean soldiers guarding transport corridors in the central region contributed to high infection rates in the local population.

While the HIV situation in the central region of the country became dire almost overnight in the early 1990s, infection rates in the northern and southern regions seemed to be much lower. It was only recently that infection rates soared in the southern region<sup>3</sup>. The HIV infection rate in rural southern areas such as Gaza is comparable to that in many rural areas throughout Southern Africa (e.g., Kwa-Zulu Natal in South Africa or Botswana and Lesotho) where rates of HIV infection have soared in the past decade. The southern region of Mozambique is the source of large numbers of migrant workers to South Africa. Some of the migrants get jobs on plantations and construction sites, and others may become involved in prostitution and petty

8

<sup>&</sup>lt;sup>1</sup> HIV/AIDS in Mozambique: A USAID Brief (2002).

<sup>&</sup>lt;sup>2</sup> AIDSCAP (1995) Workshop on the Status and Trends of the HIV/AIDS Epidemics in Africa: Final Report, cosponsored by the François-Xavier Bagnoud Centre for Health and Human Rights of the Harvard School of Public Health, December 1995.

<sup>&</sup>lt;sup>3</sup> Epstein H (2002) *The Hidden Cause of AIDS*, New York Book Review.

crime. Those migrant workers that get jobs as miners in gold mines such as those in Witwatersrand in South Africa are highly paid.

During the past century, the rural provinces of Botswana, Lesotho, Mozambique and South Africa have sent millions of mine workers to the Witwatersrand. Today, about 300,000 people work there, out of whom 50,000 are from southern Mozambique alone. The miners sign annual contracts, but may spend 20 years or more as migrant labourers travelling back and forth. The migrant labour system in Southern Africa has often been blamed for the spread of HIV in that region. The long absence from home, the tedious, dangerous work, and the presence of prostitutes close to the chain link fences around the mines are all believed to contribute to miners' higher risk of HIV infection<sup>4</sup>. The South African Chamber of Mines, which represents such mining companies as Goldfields Ltd and AngloGold, denies that the migrant labour system has exacerbated the spread of HIV in Southern Africa, despite empirical evidence from Mozambique<sup>5</sup>. Nearly all the male AIDS patients who approached the local hospitals in Maputo and Gaza province had been migrant workers in South Africa—most of them Witwatersrand gold miners. Medical findings have provided fairly strong evidence that returning gold miners played an important role in bringing HIV to these regions 10–15 years ago<sup>6</sup>.

Another factor in the spread of HIV in Mozambique is the existence of various transport hubs in the country, which are often used for drug trafficking. Tons of cocaine and heroin coming from Asia pass through the ports of Mozambique every month on their way to the US and Europe<sup>7</sup>.

#### 3. Effect on demography and labour force

In the coming years, HIV/AIDS will have a significant impact on the demographic situation of Mozambique, as recent studies have shown. According to available World Bank projections<sup>8</sup>, population growth between 2000 and 2010 will be only about 1.4% per annum, as opposed to 2.5% in the absence of the epidemic. By 2010, the size of the population is expected to be about 87% of the hypothetical no-AIDS-scenario level. The loss will especially be felt in the most productive segment of the population, which will further shrink the already-scarce human resources and capital accumulation. Section 3 (i) shows clearly how this process will be brought about and what will be the exact scale of human resource loss felt in the country. HIV/AIDS poses a threat to economic development, since the majority of those infected are part of the economically-active labour force of the country, many of them engaged in the informal sector with little or no access to any sort of workplace programmes on HIV prevention. The current labour force of the country is about 9 million strong. The majority of the labour force is employed in the informal sector which, in 1997, accounted for more than half of the total value of production in the economy and continues to do so, even today<sup>9</sup>. A reduction in the number of adults implies fewer workers, which translates directly into reduced output.

<sup>6</sup> Also see Helen Epstein et al., confirming that the migrant labour system is the biggest causal factor in the spread of HIV.

9

<sup>&</sup>lt;sup>4</sup> Source: Following discussion with TEBA and Ministry of Labour officials.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Drug Trafficking Is Big Business in Mozambique, AIM Reports, No. 210, 29 June 2001.

<sup>&</sup>lt;sup>8</sup> Arndt C (2002) AIDS and Macroeconomic Prospects for Mozambique: An Initial Assessment. The World Bank.

<sup>&</sup>lt;sup>9</sup> Source: National accounts

ILO estimates use data from the UN Population Division<sup>10</sup> to project the impact of HIV/AIDS on the labour force. This paper addresses the active labour force of 15–49-year-olds. Labour force participation rates from the ILO are used to make the projections<sup>11</sup>.

#### i. Trends in population structure

AIDS-related loss of life begins primarily in those aged 15–34. However, at a later stage, the older age groups begin to lose a greater percentage of their workforce and their numbers grow at a slower rate than that of their younger counterparts. This suggests that the labour force will effectively get younger, due to AIDS. This effect would be even more pronounced if the increasing number of young orphaned children destined to enter the labour force were taken into account.

ILO projections show that, in Mozambique, the number of 15–24-year-olds (male and female combined) will increase by 51% (from 2.7 million in 2000 to 4.1 million in 2020), while the number of 45–54-year-olds will only grow by 25% (from 1.1 million to 1.3 million). In a no-AIDS scenario, the 15–49-year-old age group would have increased by 63% (from 2.8 million to 4.6 million), while the 45–54-year-old age group would have increased by 82% (from 1.1 million to 2.0 million).

The figure below shows that, by 2020, Mozambique is projected to lose 17% of its labour force due to HIV/AIDS. In absolute terms, this represents a loss of 2.2 million workers.

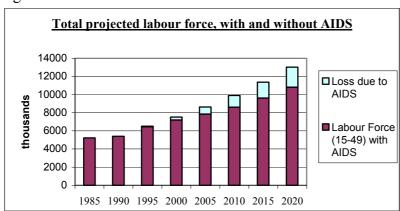


Figure 1

<sup>&</sup>lt;sup>10</sup> UN Population Division, World Population Prospects, The 2000 Revision, New York, 2001.

<sup>&</sup>lt;sup>11</sup>For the most recent estimates for 2004, please contact the ILO/AIDS office. These estimates are updated every year and during the time the report was written, they were not available for distribution. It should also be noted that these participation rates make no distinction between the participation in HIV/AIDS-affected and non-HIV/AIDS-affected labour forces. HIV/AIDS, however, may have significant effects on participation—i.e. reduced participation of infected workers, and increased participation of non-HIV-infected workers and the relatives of those infected. The projections also suffer from the common difficulty of obtaining accurate and complete data on HIV impact (e.g., data gaps with regard to the informal sector or lack of data on deaths due to AIDS). The projections can, therefore, only be treated as estimates.

The projections also show that, by 2005, Mozambique's labour force will lose 418,000 women and 354,000 men (table 2). By 2020, these figures are projected to more than double, to an estimated 1.2 million women and 1 million men. Not only the overall size but also the structure of the population will change dramatically. AIDS strikes primarily individuals aged 20–45. These are prime years, both in terms of work and family responsibilities. AIDS also affects the youngest population groups, as mother-to-child transmission (MTCT) is common in Mozambique.

Table 2. Gender segregated projection of active labour force												
Years	1995		2000		2005		2010		2015		2020	
Gender	Female	Male										
Labour force with AIDS (thousands)	3,137	3,323	3,479	3,716	3,771	4,084	4,112	4,509	4,580	5,050	5,143	5,674
Labour force without AIDS	3,168	3,347	3,654	3,861	4,189	4,438	4,803	5,100	5,515	5,862	6,315	6,715
Labour force loss due to AIDS	31	24	174	145	418	354	691	592	936	812	1,173	1,041
% loss due to AIDS	1.0	0.7	4.8	3.7	10.0	8.0	14.4	11.6	17.0	13.9	18.6	15.5

Figure 2 indicates the past and projected life expectancies at birth from 1950 to 2050. By 2010, life expectancy at birth is expected to drop from 43 to 36 years, instead of increasing to 50 years, as it was projected to do, in the absence of AIDS.

The figure shows that the improvements in life expectancy over the past several decades are annihilated by AIDS. For Mozambique, life expectancy is expected to decrease until 2005, when it is expected to reach a low of 38 years of age. This is 12.6 years less than in a no-AIDS scenario. In the southern and central regions, life expectancy by 2010 is expected to decline to about 36 years, as opposed to a projected 50 years in the absence of the pandemic (Ministry of Health et al., 2001).



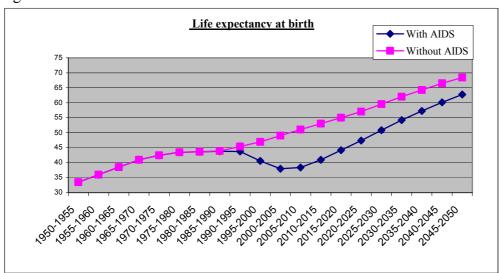
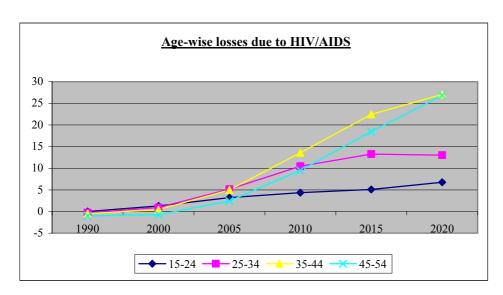


Figure 3 shows the loss due to HIV/AIDS felt in different age-groups, confirming the highest losses felt in the most productive age-group of the population, 35-44 years. These acute losses

translate into a loss of skills and experience built over a number of years and depletion of the labour force in their active prime.



#### **B.** Economic impact of HIV/AIDS

#### i. Macroeconomic impact

The macroeconomic impact of AIDS is difficult to assess. Most studies have revealed that estimates of the macroeconomic impacts are sensitive to assumptions such as how AIDS affects savings and investment rates or whether AIDS affects better-educated employees more than it affects others. Few studies have been able to incorporate the impacts at the household and enterprise level into macroeconomic projections. However, while the overall impact of AIDS on the macroeconomy may be small initially, its cumulative impact will be quite substantial over time.

There are several mechanisms by which AIDS affects macroeconomic performance. AIDS-related deaths lead directly to a reduction in the number of workers available. These deaths occur among workers in their most productive years. As younger, less experienced workers replace these older, more experienced workers, worker productivity is reduced<sup>12</sup>.

Recent analysis by Arndt et al. suggests that economic structures, when combined with the incidence of HIV, are major drivers of the overall macroeconomic impact of the epidemic and the channels through which this impact occurs. For example, unsustainable debt burdens also undermine growth by constraining public and private investment in all spheres of economic life. Levels of public investment are restricted by the budgetary constraints on governments by structures such as the International Monetary Fund (IMF) and the World Bank to ensure long-term loans. The same author also notes that, in a country such as South Africa, unemployment among unskilled and skilled workers is so prevalent that labourers lost to AIDS are likely to be replaced, neutralizing the effect of AIDS on the labour force in those labour segments (reduced rate of labour accumulation). Highly skilled labour (human capital) is fully employed;

\_

<sup>&</sup>lt;sup>12</sup> AIDS Analysis Africa (1997) Country Profile: Mozambique, 7(5): Feb/Mar 1997.

however, the incidence of the epidemic is strongly biased towards the less skilled labour segments. As a result, in South African labour accumulation and human capital effects are relatively small. In Mozambique, by contrast, the impact channels are likely to be quite different. No empirical evidence on the effect of AIDS on employment and labour supply has been obtained so far, but it can be estimated that, in a country with such a limited skill pool, the loss of key workers in specific skill categories could amount to a large loss for the employer and society on the whole.

#### i. Impact on the national budget

AIDS-related illnesses and deaths negatively affect productivity and, hence, GDP by both increasing expenditures for social services and reducing revenues. In most nations in sub-Saharan Africa afflicted by the AIDS pandemic, the AIDS budget allocated by the Ministry of Health (MISAU) has changed little over time and few expect Mozambique to deviate from this norm. In most countries, the budget allocation to defence is as high as 10% of the total budget, whereas health receives up to 1-2% of the expenditure. There is already considerable competition for resources in the health sector and an increase in morbidity from other causes is to be expected as programmes, such as those to eradicate malaria, will be scaled down, due to increased AIDS-related expenditure. As a result, health spending is unlikely to drive up budget deficits. In addition, investment is primarily from foreign funds (e.g., aid and foreign investment). These facts indicate that the effect on capital accumulation from expenditure switching (i.e., more emphasis on health and education) will not be that prominent. However, the effects will be significant if the cost of ARV is added. According to one recent estimate, providing triple combination antiretroviral therapy to HIV-positive adults in Mozambique would cost 67% of GDP<sup>13</sup>. Hence, even if the money were available, it is unlikely that such a huge percentage would be devoted to treatment. Moreover, the limiting factor for treatment is not money to buy drugs but the lack of skilled staff in the health sector and poor physical infrastructures (health centres, roads to get there, laboratory facilities etc).

#### ii. Gross domestic product

In Mozambique, GDP growth is estimated to be 0.3–1% per year lower than it would be without AIDS<sup>14</sup>. The slowdown is due to reduced productivity growth, reduced population growth, reduced human capital accumulation and reduced physical capital accumulation.

In a recent cross-country analysis, Bonnel (2000) finds a strong negative association between adult HIV prevalence and per capita GDP growth. At an adult prevalence rate of 15%, he predicts that the annual per capita GDP growth will be reduced by about 1%. For Mozambique, the HIV/AIDS pandemic could therefore have significant economic impacts. If different scenarios are compared (i.e., one with AIDS and the other without AIDS) until the year 2010, GDP growth rates can be seen to diverge substantially over the period, reaching a gap of 3–4.4% per annum in 2010. Due to these growth differentials, the economy is expected to be 16–23% smaller in 2010, relative to the no-AIDS scenario. Decreases in population growth rates neutralize the decreases in per capita GDP growth rates. Over the projection period, it is estimated that cumulative per capita GDP growth rates will be between 0.3% and 1.0% lower 15.

٠

<sup>&</sup>lt;sup>13</sup> Hogg R et al. (1998) One world, one hope: the cost of making antiretroviral therapy available to all nations, International Conference on AIDS. 1998; 12:830 (abstract no. 444/42283).

<sup>&</sup>lt;sup>14</sup> Channing, Arndt (2002).

<sup>&</sup>lt;sup>15</sup> Arndt et al.

#### iii. Poverty

There is strong bi-causal correlation between AIDS and poverty. Poverty in Mozambique affects over two-thirds of the country's people. Seventy per cent of the population lives below the poverty line, existing on an average of US\$0.40 per day (Ministry of Planning and Finance, 2000<sup>16</sup>). The incidence of poverty is higher in rural areas (71%), where 80% of the population live, than in urban areas (62%). Levels of poverty in the centre of the country were highest, at 73.8%, compared to 66.3% in the north and 65.8% in the south. On the Human Development Index (HDI), which comprises variables such as infant mortality rates, educational attainment or health status, Mozambique ranks as one of the poorest countries in Southern Africa.

#### 2. Impact on specific economic sectors<sup>17</sup>

The perceived effect of HIV/AIDS varies within different sectors. For example, one engineering project in Maputo reported not noticing any impact of HIV/AIDS in their region or in the country, while another development project in Manica felt there had been an impact both in their area and nationwide<sup>18</sup>. These different perceptions might be due to the different chronology of the epidemic. The Central region (Manica, Sofala Tete) is presumably the area where HIV spread already during the late 1980s and early 1990s, due to the traffic down the Beira Corridor, uninterrupted by the civil war, while, in other parts of the country, the dynamics of the epidemic only got fully under way after the end of the war. This means that, in the central region, AIDS-related mortality and morbidity are already very high, while, in the north and the south, many of those infected are still in the latent period.

#### i. Transport

According to local sources, the transport sector in Mozambique has been badly affected by AIDS. There are three major sea ports in Mozambique (Maputo, Beira and Nampula/Nacala). Selected surveillance data on port workers with tuberculosis have revealed higher co-infection rates with HIV than those found among TB patients in the rest of the country. This could be an indication of the higher risk faced by these workers. HIV infection rates are also higher along the main transport routes. Surveillance data from the central corridor road from Beira to Zimbabwe and Malawi indicated prevalence rates of 30.3%. Because of these high rates, international organizations, such as UNAIDS, GTZ (a European Union-funded project) and DfID have started prevention programmes for these target groups.

#### ii. Mining

Miners earn relatively high salaries compared to other Mozambicans, but their work is particularly hazardous. In Southern Africa, they have the highest rates of tuberculosis and silicosis worldwide. Most mining is conducted at sites far from population centres, forcing workers to live apart from their families for extended periods of time. As a result, miners often resort to using the services of commercial sex workers. Many become infected with HIV and spread that infection to their spouses and communities when they return home. Highly-trained

\_

<sup>&</sup>lt;sup>16</sup> Poverty, defined by the government as the inability of individuals to ensure for themselves and their dependants a set of minimum basic conditions for their survival, is widespread throughout the country.

<sup>&</sup>lt;sup>17</sup> Much of the information on the sectors affected is the result of an ILO mission to Maputo in March 2004, and is based on ILO interviews with key informants, and staff of international organizations based there.

<sup>&</sup>lt;sup>18</sup> Hemrich G and Schneider B (1997) HIV/AIDS as a cross-sectoral issue for Technical Cooperation, GTZ, Eschborn, Germany, page 28.

mining engineers can be very difficult to replace. As a result, a severe AIDS epidemic could seriously threaten mine production<sup>19</sup>. Although mining companies now provide condoms to their employees, there are doubts about how many miners actually use them (according to The Employment Bureau of Africa, TEBA). Also, it is commonly believed in Mozambique that giving condoms to women encourages disrespect and promiscuous behaviour. Despite the fact that condoms are cheap and generally available, only 9 million were sold in Mozambique last year.

An ILO visit was organized to the central office of TEBA, which deals with Mozambican mine workers' pensions and various pension and benefit funds in Maputo<sup>20</sup>. According to TEBA, 55,000 mine workers were recruited in 2003 to be sent to South Africa, of whom more than 100 came back terminally ill with AIDS.

In most cases, these workers are repatriated from South Africa without knowing their HIV status, and it is only in Maputo that they become aware of it. TEBA has been operating a pilot home-based-care programme since 2002 in the Gaza province. Recently, TEBA admitted that pensions and compensation money are owed to at least 10,000 Mozambican miners who lost their jobs in the past 20 years, or to their families, if the men have died. Officials, however, claim they have not been able to find the beneficiaries because of population movements during the war.

To counter these problems, MISAU, with the help of many NGO channels, have distributed condoms *en masse*. The Mozambican miners' union, with the help of the American Mineworkers' Union, the AFL-CIO (American Federation of Labour - Congress of Industrial Organizations), the ILO and other organizations have conducted awareness-raising sessions on AIDS for new recruits at the mine induction centre near the border. Employment-generation programmes for the widows of miners who had died of AIDS have also been introduced. Among other recent efforts to check the epidemic in the mining sector, a joint project between the *Organizaçao dos mineiros moçambicanos* (the Association of Mozambican Miners) (AMIMO), the South African National Union of Mineworkers (NUM), TEBA, and the Southern African AIDS Training (SAT) Programme is under way in order to control the spread of HIV along the Maputo corridor. It aims to prevent the spread of HIV by miners to their families in Mozambique and to assist families affected by HIV or AIDS. The project includes various prevention programmes as well as income- and employment-generating activities.

#### iii. Agriculture

Agriculture is the largest sector in the Mozambican economy, accounting for a large portion of production and the majority of employment. According to the coordinator of a development project supported by GTZ, HIV/AIDS is expected to have a significant impact on the project: "We will not be able to increase or to stabilize agricultural yields [and] it will be necessary to educate and train additional people" 21.

-

<sup>&</sup>lt;sup>19</sup>AIDS Analysis Africa (1997) Country Profile: Mozambique, 7(5): February/March 1997.

<sup>&</sup>lt;sup>20</sup> TEBA was established in 1902 as the recruiting branch of the South African Chamber of Mines. It is still associated with the Chamber, and is paid by the mining companies to recruit mine workers and disburse their salaries, pensions and benefits.

<sup>&</sup>lt;sup>21</sup> Hemrich G, Schneider B (1997) HIV/AIDS as a cross-sectoral issue for Technical Cooperation, GTZ, Eschborn, Germany, p. 28.

The loss of workers for the crucial periods of planting and harvesting can significantly reduce the size of the harvest. In a country such as Mozambique, where food security is a continuous issue, any declines in household production can have serious consequences. Furthermore, a loss of agricultural labour is likely to cause farmers to switch to less-labour-intensive crops. In many cases, this may mean switching from export crops to food crops. Thus, AIDS could affect the production of cash crops as well as food crops.

#### iv. Health care

The majority of the population of Mozambique has very limited access to health-care services, with fewer services in rural areas, where 80% of the population are concentrated. Less than 40% of the population have access to health-care services and fewer than 50% of births are attended by skilled personnel. The roads and means of transportation available in some areas of the country do not allow for proper communication to or from health centres.

Nationwide, the public sector is the main health provider for all health-related services. The health sector in Mozambique is not well equipped to deal with the epidemic. Mozambique has the lowest number of doctors per capita in Africa, and 46% of the primary health centres were destroyed by 1990 in the civil war<sup>22</sup>. Empirical evidence suggests that patients with HIV/AIDS may occupy up to 20% of rural hospital beds. In the north, the director of Internal Medicine at Beira Central Hospital tested all her patients for two months and found almost 80% to be HIV-positive. The cost of caring for people living with HIV/AIDS will eventually overburden the country's health-care system. Moreover, outside of these health-care services, communities in Mozambique are particularly ill-prepared to care for people living with HIV/AIDS<sup>23</sup>.

Recent estimates show that there are 17,000 health workers in Mozambique, of whom only 11,000 are trained<sup>24</sup>. Only 6% are doctors and in Sofala, only 3 out of 13 districts have a doctor. As a result, the number of doctors and nurses per patient is very low, compared with other neighbouring African countries (the ratio of nurse to patient is 1:5000, compared with 1:1298 in Malawi, 1:704 in Zimbabwe, 1:610 in Zambia, 1:457 in Botswana and 1:215 in South Africa).

Only a small number of doctors have been allowed to prescribe antiretroviral treatment. The number of counsellors and pharmacists is also inadequate. Counsellors have been trained incrementally according to the number of voluntary counselling and testing (VCT) centres opened, and there are not enough to cover the whole National Health Service. All existing VCT centres in Mozambique are externally funded and often managed by NGOs or bilateral aid agencies.

Today, in Mozambique, there are only 14 pharmacists in the public health system and 24 in the private sector. Twelve more pharmacists are expected to graduate this year to reinforce the workforce. To make up for the shortfall in pharmacists, a basic level of pharmacy training is provided. However, these persons cannot replace fully trained pharmacists, whose responsibilities include supervising the quality of drugs administered.

.

<sup>&</sup>lt;sup>22</sup> UNAIDS Mozambique Country Profile,

<sup>&</sup>lt;sup>23</sup> US Synergy Project (2002) HIV/AIDS in Mozambique: A USAID Brief.

<sup>&</sup>lt;sup>24</sup> Excerpts from the results (on the health sector) published during the recent CHGA (Commission on HIV/AIDS and Governance in Africa) meeting in Maputo, March 2004.

Annually, the districts lose 7% of their staff, mainly due to transfers or death. It is estimated that 10–15% of the health-care staff will be lost due to AIDS between 2002 and 2010<sup>25</sup>.

The level of knowledge of AIDS is very low in all ranks of health-care workers. Most health workers are unable to provide complete information to patients and are not trained to treat opportunistic infections.

The management of human resources is impeded by bureaucratic procedures as well as structural adjustment measures that obstruct enrolment of government staff. Health-care personnel are poorly paid even though some provinces have started incentive programmes to retain their employees.

The quality of care suffers from the unavailability of skilled professionals in remote areas, poor motivation and low professional ethics as a result of the difficult working conditions, low remunerations and badly maintained infrastructures. The health infrastructure in Mozambique is weak. The provinces of Nampula and Zambezia (in northern Mozambique) are the most populated, with the fewest number of beds per 1,000 people. Those who seek testing have to use the few existing VCT centres, which are sometimes situated outside hospital premises. Experience shows that all VCT centres situated outside health centres are not very well accepted by the population. Handling the increased demand as a result of HIV/AIDS requires substantial strengthening of the health system and services. This includes management of drug procurement and distribution, rehabilitation and expansion of the physical infrastructure, acquisition of equipment and supplies, and improvement of laboratories.

Given the inadequacy of the health-care system and the limited resources available, the government will face several very difficult trade-offs, such as, for example, treating AIDS versus preventing HIV infection; treating AIDS versus treating other illnesses; and allocating resources for health care versus expenditure in other areas.

Despite all national and international efforts mentioned later in section C, the number of patients presumed to be in immediate need of antiretroviral treatment (ART) is 54,000, but less than 2000 are currently undergoing treatment<sup>26</sup>. However, the next NSP covering the period 2004–2008 presents a more comprehensive list of services, namely: VCT centres, day hospitals, youth-friendly services, prevention of MTCT, and home-based care. But these services only cover a very small part of the country. From 2000 to 2002, a total of 55,591 adolescents and young people aged 10–24 (only 18% of whom were male) availed of these services<sup>27</sup>. Health-care units lack equipment for HIV diagnosis. The Centres for Disease Control and Prevention (CDC) provide testing facilities for VCT, prevention of mother-to-child transmission (PMTCT), and blood banks in the country but not for diagnostic testing in health centres. The Pharmaceutical Department in the Health Ministry estimates that a 40% increase in antibiotics is needed for treatment of opportunistic infections. Funds are needed for provision of ART, and improve the national health-care service and systems.

<sup>&</sup>lt;sup>25</sup> Ministry of Health, Relatorio de Avaliação Conjunta (Joint Evaluation Report), 2003.

<sup>&</sup>lt;sup>26</sup> Ministry of Health (MISAU), 2003.

<sup>&</sup>lt;sup>27</sup>ECA, Commission for HIV/AIDS governance in Africa (CHGA) (2004). Mozambique, 'The Socio-economic impact of HIV/AIDS' accessible at <a href="http://www.uneca.org/chga/maputo/SOCIO\_ECO\_IMPACT.pdf">http://www.uneca.org/chga/maputo/SOCIO\_ECO\_IMPACT.pdf</a>.

#### v. Education

The education sector is affected by many factors related to HIV/AIDS. On the supply side, HIV prevalence rates are higher among teachers than among the general population<sup>28</sup>. On the demand side, children may be kept out of school if they have to care for sick family members or work in the fields. The main reason cited in a study in 1997 (prior to the onset of the epidemic) for children not attending school (in villages that had a school) was the need for children to work (Handa, Omar, and Ibraimo 1998). As the epidemic matures and parents fall ill and die, the need for children to work will clearly become more pressing.

Over the period 2000–2010, HIV/AIDS is projected to result in the education sector losing some 17% of its personnel<sup>29</sup>. Across all levels, some 9,200 teachers will die, and an estimated 123 senior managers, planners and administrators will be lost. For each of these educators, about 18 months of productive work time will also be lost as they succumb to the disease. As a result of existing problems affecting the supply of education, HIV/AIDS will have little effect on reducing the demand for education, except at the primary-school level. The worsening supply of education due to the pandemic will further depress the ability of the system to meet demand at all levels. There are 2.6 million children in schools in Mozambique, the majority of them in primary school (85%). While the number of children in primary school will continue to increase despite the spread of HIV/AIDS, the rate of increase will decline. This is because fewer children will be born, and many of those who are born HIV-positive will die before they enter the school system. By 2010, it is expected that there will be 13% fewer children in primary school than would otherwise be the case.

The total estimated cost to the education system is estimated to be around US\$110 million. This represents an additional cost of 6.9% due to HIV/AIDS alone. The bulk of these costs arise from related illness and death benefits and, to a lesser extent, from increased teachertraining costs. With the education system currently receiving around 14% of the national budget, these losses will have a significant impact on the ability of the state, and of the Ministry of Education (MINED), to cope. In the meantime, various initiatives have been taken to promote HIV-prevention activities in education, supporting the national HIV/AIDS strategic plan for the sector. An information kit is currently being developed and assembled for delivery to 40,000 teachers early next year. A module on HIV/AIDS has been developed by ADPP/Humana People to People<sup>30</sup> for use in training teachers in six colleges in the country.

Already 600 teachers have been trained, and are now using their knowledge and skills to reach people through their community work and through clubs. Additional materials were ordered for distribution to other NGOs through SAIDAS. IAP developed an HIV/AIDS-related life-skills module for its programme to upgrade teachers (through distance teaching methodologies), and introduced the course in 2001. INDE (*Instituto Nacional de Desinvolvimento de Educação*— the National Institute for Educational Development) has

-

<sup>&</sup>lt;sup>28</sup> Interviews with Ministry of Labour employees.

<sup>&</sup>lt;sup>29</sup> Source: <a href="http://www.mined.gov.mz/documentos.php">http://www.mined.gov.mz/documentos.php</a> and *Modernização e Reestruturação do MINED Revisão do Plano Estratégico* (Modernization and Restructuring of the Ministry of Education, Revised Strategic Plan) (2004–2008).

<sup>&</sup>lt;sup>30</sup> ADPP (*Ajuda de Desenvolvimento de Povo para Povo*) Humana People to People operates 23 projects in Mozambique.

finalized the first draft of the materials prepared for complementary reading for primary-school children. These are currently being commented upon, and will be tested in the classroom shortly. Life-skills training with a strong bias towards HIV and AIDS has been undertaken in all six provinces (Nampula, Zambézia, Sofala, Manica, Gaza and Inhambane). Staff members from the national directorates of MINED, INDE, IAP, and staff from the provincial directorates in the provinces, were involved in the training. Some 30 NGOs have been trained in the use of communication materials, with special training undertaken in coordination with FDC (Fundação para o desenvolvimento da comunidade), involving 50 teachers and 5 students from Maputo Province. Students from the *Escola de Jornalismo* (the School of Journalism) were also trained in the use of these materials. Youth groups have also been supported in the Beira corridor (Gondola, Manica, and Bárue districts, as well as Cidade de Chimoio), where they have been trained as activists. The provincial directorates of education and health in Manica Province facilitated the training. Additional capacity was built into the basic education programme to give a major boost to youth in 2001. Recruitment of staff is currently under way.

A recent UNICEF-supported study of the impact of HIV/AIDS on the education sector concluded that the supply of education in Mozambique would be dramatically affected by the HIV/AIDS pandemic. HIV/AIDS activities focus on life-skills education for young people in schools, in collaboration with MINED.

Household incomes are reduced as a result of AIDS. This might deter families from sending their children to school as they cannot afford school fees. The education system faces the additional challenge of educating students about AIDS and providing them with the means and skills to protect themselves from HIV. The education sector was beset with problems even before the advent of HIV in the country. Now, because of AIDS, the little progress that has been made in the sector in producing professionals is being reversed. AIDS is decreasing the school-age population, reducing schooling rates, and impairing the capacity of the education system to fulfil its mandate. All of these factors point to a reduced rate of human capital accumulation.

#### 3. Microeconomic impact

#### i. Enterprises

For the private sector, HIV/AIDS affects both the micro and macro level. The impact on the workforce is felt in greater absenteeism, high turnover and reduced productivity.

#### ii. Households

The epidemic results in both *AIDS-impacted households* (i.e., those households that have someone who is HIV-positive), and *AIDS-affected households* (households that are affected in some way by the epidemic—for example, by having to look after orphaned children, or by the need to reallocate labour, etc.). The number of orphans (two-thirds of whom were estimated to have lost one or both parents to AIDS) was estimated at 500,000 in the year 2000 (UNAIDS).

The number of orphans is rising rapidly in Mozambique. An interview with GTZ staff in Maputo cited 60,000 orphans in Sofala province alone. In one district, it was found that there were 379 orphans out of approximately 3,000 inhabitants (UNICEF 2002). Most of them had dropped out of school because they could not afford the US\$1.5 annual school fee.

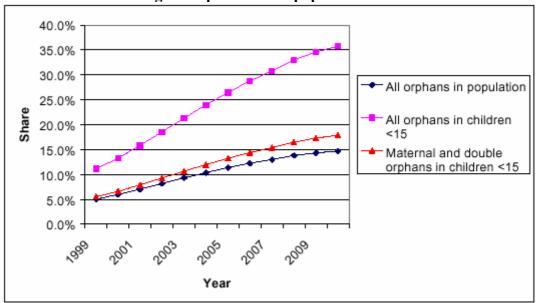
Learning materials and school uniforms were also out of reach for most of them. UNICEF, with the help of local NGOs, has been actively working to get orphans back to school by exempting them from school fees and providing children with basic school supplies of

notebooks and pens. One of the problems is that many of these orphans are not even officially registered as citizens, which means that they do officially not exist and therefore cannot be exempt from anything).

An ILO<sup>31</sup> visit to local orphanages revealed that more than half of the orphans had lost one or both parents to AIDS. It is estimated that, by 2010, the number of orphans will almost triple (to 1.4 million), mainly due to AIDS (90%) (see Figure 4)<sup>32</sup>. While the war provided the country with experience in dealing with the problem of orphans, interviews with the International Federation of Red Cross and Red Crescent Societies and other humanitarian organizations reveal that, in the centre, when the epidemic was at its peak, communities and extended families took in many orphans but have now reached saturation point. In the north and south, the prevalence rates are still climbing.

Figure 4

Percentage of orphans in the population



Source: A combination of Ministry of Health estimates and calculations obtained by Hunter and Williamson (2000).

#### C. Policy options

1. Response to the HIV/AIDS epidemic

#### i. National response

Mozambique has recently shown great political will to combat the HIV/AIDS epidemic. Overall, up to US\$29 million of committed money has been allocated to AIDS interventions. There is a lot of initiative on the side of the government to implement programmes and activities to mitigate the impact of the epidemic. The government is aware of the impact of HIV/AIDS on its dwindling human resources.

<sup>&</sup>lt;sup>31</sup> The ILO mission visited orphanages around Maputo, funded by organizations such as the International Federation of the Red Cross and Red Crescent Societies, *Terre des Hommes* and sustained by other NGOs. <sup>32</sup> Arndt et al.

The Plan of Action for the Reduction of Absolute Poverty (PARPA) 2001–2005 has set a target of a 30% reduction in absolute poverty in Mozambique by 2010. This plan includes a commitment to respond to HIV/AIDS through education and health-care-related activities. Furthermore, the government has endorsed the Declaration of Commitment on HIV/AIDS adopted by the United Nations General Assembly Special Session in June 2001, and the UN Millennium Development Goal of stopping, and reversing the spread of, HIV by 2015. Additionally, in October 2001, parliament passed a law that specifically prohibits any discrimination in the workplace against people living with HIV/AIDS.

MISAU approved a National Strategic Plan (NSP) to Combat STD/HIV/AIDS for 2000–2002 (this plan is currently under revision and is expected to be officially launched in September 2004). The NSP had a multi-pronged approach towards AIDS, targeting orphans and youth, VCT and care-and-support activities. However, the 2000–2002 NSP was under-funded and few of the planned activities were actually carried out<sup>33</sup>. A National AIDS Council (NAC) was subsequently established to coordinate a multisectoral approach to preventing and controlling the epidemic, spearheading non-medical government efforts, developing budgets and monitoring mechanisms. The National AIDS Control Programme (NACP), with MISAU, is responsible for the nationwide health-sector response to HIV/AIDS with an approach called 'rede integrada', focusing on an integrated network of services for HIV-infected people and an improvement of health sector performance in related services (see figure).

The NACP promotes the use and provision of condoms, voluntary HIV/AIDS counselling and testing services, and treatment for STIs. The programme also guides the development and training for new protocols related to HIV, tuberculosis and malaria; provides training and materials to improve home-based care; coordinates the collection and analysis of improved prevalence data; and supports an HIV/AIDS information hotline, managed by the Mozambique Network of AIDS Service Organizations (MONASO). MONASO is also active in many AIDS-awareness-building activities and acts as a facilitator for community-based organizations in the fields of home-based care and interventions for orphans and other vulnerable children.

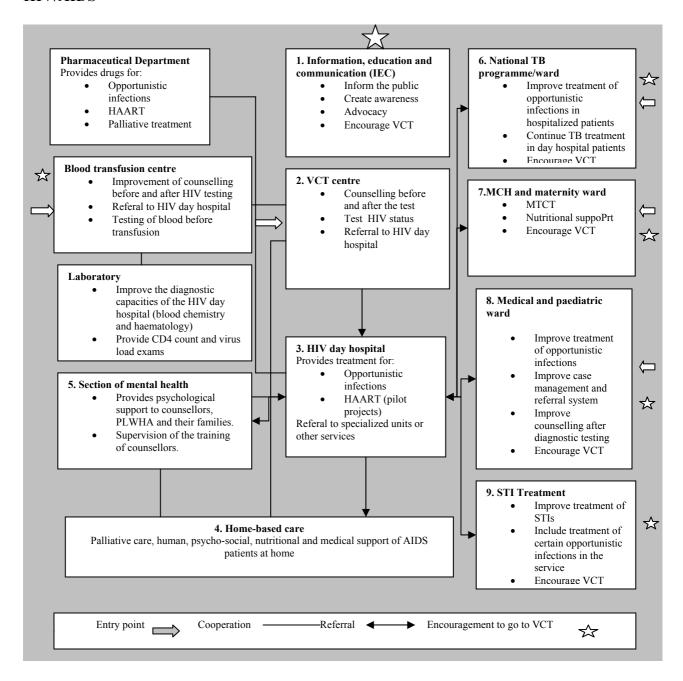
A business coalition (Forum Empresarios contro SIDA<sup>34</sup>) against HIV/AIDS was also formed under the umbrella of CTA (Confederação de Associações economicas de Moçambique). It was constituted as a result of a fusion between two business coalitions against AIDS namely, Empresarios contro SIDA (strongly supported by Austral Consultoria, a consultancy firm in Maputo) and AIDS Forum (supported by the consulting firm Cympogest. (Both consulting firms are now board members of the new forum.) The main donor for CTA is USAID, along with other donor groups. GTZ has just started to develop a programme with ACCA and one of the members of Empresários contro SIDA called ACIS (Associação Commercial e Industrial de Sofala) to develop comprehensive workplace programmes on HIV/AIDS. FDC has a programme in Maputo and other provinces called Ésh! (Escola sem HIV/AIDS—Schools without HIV/AIDS).

-

<sup>&</sup>lt;sup>33</sup> Source: CHGA document, ibid.

<sup>34</sup> www.cta.org.mz

### 'Rede Integrada (Integrated network)': government strategy and health sector response to HIV/AIDS



So far, 15 line ministries have developed sectoral operational plans and have started implementing programmes and activities addressing HIV/AIDS. The Ministry of Health (MISAU) has developed a National Strategic Plan for Health that comprises a sector-wide approach that fosters partnerships for multisectoral interventions to respond to HIV/AIDS. The community response has grown, stimulated by the work of national and international actors, such as non-governmental organizations (NGOs), faith-based organizations and community-based organizations (CBOs). However, their efforts are not sufficient to reach population groups in remote areas.

As part of the National Strategy Plan to Combat STD/HIV/AIDS, the Ministry of Education (MINED) has developed a sectoral strategy. MINED's programme to control and prevent HIV

is based on the policies and strategies contained in the National Strategic Programme against STIs/HIV/AIDS. Within the Ministry, this project is known as 'Education on Issues of Population and Family', under the *Instituto Nacional de Desinvolvimento de Educação* (National Institute for Educational Development, INDE). The programme defines the main target group as youth, especially girls, and the Ministry is viewed as being responsible for ensuring that school-going children receive appropriate education on HIV-related issues. The priority areas to be covered are urban and rural areas in, or close to, the economic corridors where the impact of the epidemic is known to be worst. Under this programme, the Ministry is participating in management and coordination groups, specifically in provincial and regional nuclei, an inter-ministerial Committee and the National Committee against STDS/HIV/AIDS.

#### ii. International response

The NSP is currently being revised, and there is a new commitment in government and among stakeholders to develop an expanded response to the epidemic. This commitment resulted in the Integrated Workplan of the UN for HIV/AIDS in 2003, which included activities that directly and indirectly relate to the impact of HIV/AIDS on human resources. There are many organisations, both international and NGOs committed to the mitigation of HIV/AIDS and the list below is certainly not exhaustive. Some of the main organizations such as UNDP, UNICEF and UNFPA are also working on developing workplace programmes, whereas FAO and UNDP are carrying out impact studies on agriculture, health and education.

The World Bank and MONASO are working together to include STI/HIV-prevention activities for the Roads and Coastal Shipping (ROCS) Project. The funds of the World Bank Multicountry AIDS Program (MAP) are channelled through the CNCS (*Conselho Nacional de Combate ao HIV/SIDA*) and Austral Consultoria will be the facilitator for the private sector funds of the MAP. DfID financed a project to assist in the development of national SMI enterprises, which included an HIV/AIDS sensitization programme in these companies, *Projecto Pode*.

USAID is the lead donor in HIV/AIDS programming in Mozambique, providing US\$6.6 million in HIV/AIDS assistance in 2001. It has developed a two-pronged strategy for HIV/AIDS prevention and care, based on the need to: 1) increase knowledge, motivation and skills for HIV-risk reduction through behavioural change communications and community-based skills training; and 2) increase the supply of HIV-prevention services (i.e., condoms, voluntary counselling and testing, and sexually transmitted infection treatment) at the community level.

USAID has also implemented a comprehensive set of prevention-and-care activities in the Maputo Development Corridor, including a workplace programme, complemented by increased availability and quality of voluntary counselling and testing and STI services; and cross-border coordination to target high-risk groups that move between Mozambique and its neighbours, South Africa and Swaziland.

Besides there are some independent organisations such as Sant'Egidio in Mozambique that are working on providing people with treatment. MSF (Medecins sans Frontieres, Doctors without Borders) who work in a comprehensive way and are one of the first to implement an Integrated Health Network, promoted by the Mozambican MoH (see rede integrada above). Health Alliance International works on treatment as well, in Chimoio and Beira districts. Both work in

close collaboration with MoH and respect the national decisions and guidelines, with an eye on sustainability.<sup>35</sup>

The PSI (Public Services International) Condom Social Marketing and Communications Project is a component of the NACP of the Ministry of Health. The project promotes *JeitO condoms* (Jeito literally means 'manner/way') through many creative channels such as television, radio, theatre and outdoor advertising. Recently they produced a CD of local music groups who participated in a JeitO contest, sponsoring JeitO nights at local discos, and sponsoring concert events. Activities have been developed with consistent messages and an integrated media mix around a strong positive brand concept. The brand JeitO permits powerful puns such as "Live with JeitO" and "Only with JeitO". PSI reaches out to youth and workers through specialized sub-projects in schools and workplaces. It trains and supports HIV/AIDS peer educators in participating schools and conducts interpersonal communications activities with students. PSI's package of services for workplaces includes small group activities, theatre, video presentations with discussions, training of peer educators, training of clinic staff in STI prevention and treatment, and sale of JeitO condoms.

#### iii. ILO projects in the workplace

The ILO Employment and Skills training department carried out research in Mozambique advocating skill-based training, employment and infrastructure development in collaboration with other agencies such as DfID and UNESCO. In Mozambique, existing capacity for skills training is weak and poorly linked to labour and product market demand. Many training programmes are of poor quality and do not provide a sufficient level of skills to support a viable livelihood. This is the legacy of inadequate education and past skills development, of former economy models and of war-time destruction.

In addition, the ILO launched a new campaign for Portuguese-speaking African (PALOP) countries to extend social security to more of their citizens. In doing so, it has been closely working with workers' organizations and other civil society organizations such as the Mozambican Workers' Organization (OTM-CS)—the national trade union federation; the Free and Independent Trade Unions Council of Mozambique (CONSILMO) and MONASO.

The US department of Labor, together with the ILO, is working with HOPE in collaboration with the Mozambican Association for the Development of the Family (AMODEFA), TEBA and AMIMO to implement a Project *Kuhluvuka* (*Corredor da Esperança*) in Gaza and Maputo provinces. The aim of the project is to prevent the spread of HIV by the miners to their families in Mozambique, and to assist those families with infected members in dealing psychologically and medically with the person infected and to provide economic alternatives to improve their living conditions.

#### **D.** Recommendations

The role of the ILO would be to assist the government in national capacity-building in a manner that brings about a more effective implementation of programmes. National capacities need to be strengthened to enable the country to take the lead in planning and implementing appropriate responses across all sectors, including, but not limited to, the health sector.

<sup>35</sup> For more on PSI activities, see, http://www.psi.org/where\_we\_work/mozambique.html

Mozambique faces problems in implementation of national plans at a provincial and district level. Therefore, at the national level, there is a need for an ILO representative (national programme coordinator) who is involved in negotiations with the ministries, donor coordination of the sector and policy development. The ILO should also support provincial and district structures in order to ensure the implementation of national programmes. Through a national representative, the ILO can ensure that the following recommendations will be carried out:

- Given its tripartite structure for coordinating government, employers and workers, the ILO is ideally placed to carry out a multisectoral assessment of the demand and supply of labour and recommend the kind of systems required in order to obtain the necessary human resource skills required to mitigate the impacts of the epidemic.
- Research on workplace programmes in the education and health sectors should be carried out, as these two sectors provide the skills required for essential services.
- The country also requires programme aid to prepare the labour force—enterprises and
  individuals—for being employed in such a volatile market. With its core competencies
  in employment generation, enterprise development and the evaluation of social security
  systems, the ILO can help to factor the demographic situation in Mozambique into the
  planning process.
- Collaboration with trade unions is essential for sensitizing enterprise-level staff on issues related to HIV/AIDS. This approach should include training and capacitybuilding of such staff on issues related to HIV/AIDS at work, including the integration of HIV/AIDS issues into trade union activities; discussion of issues related to HIV/AIDS and the workplace; and the integration of women and youth into all HIV/AIDS interventions.
- The role of the ILO *vis-à-vis* the employers should help ensure that HIV/AIDS policies in the workplace permeate all firms and not only a few elite corporations, so that the benefits reach the grass-root level. Workplace-based programmes to prevent new infections and to provide access to ART should be negotiated with employers. Other approaches, such as tax benefits or other incentives for training can encourage firms to maintain worker productivity in spite of the loss of experienced workers.
- Special programmes in various sectors can mitigate the impact of AIDS by addressing some of the economic problems being faced by households. Reduced school fees can help children from poor families and children orphaned by AIDS to stay in school longer, thereby avoiding deterioration in the education level of the workforce.
- Some big employers already offered treatment including Highly Active Antiretroviral Treatment (HAART) to their employees, but there are not enough service providers in the public and private health sector. The ILO could make a huge contribution by assisting the private health sector in establishing treatment and care facilities as an alternative to the national health system, which is already over-extended, so that people seeking care and wanting to pay for it can find a service provider offering a defined quality for a reasonable price. It could also support the establishment of managed care schemes, such as PPOs, MHOs, MCO, PHO, and OHP to help companies provide care and treatment facilities.

#### **Background literature**

Arndt C (2003) HIV/AIDS, Human Capital and Economic Growth Prospects for Mozambique, The World Bank, Washington, DC.

Council of Ministers (2000) National Strategic Plan to Combat STD/HIV/AIDS, 2002–2003.

Economic Commission for Africa (2004) Mozambique: The Challenge of HIV/AIDS Treatment and Care, CHGA (Commission on HIV/AIDS and Governance in Africa), Addis Ababa, Ethiopia.

Epstein H (2002) The Hidden Cause of AIDS, The New York Review of Books.

FAO/UNAIDS (2003) Addressing the Impact of HIV/AIDS on Ministries of Agriculture, Focus on Eastern and Southern Africa, FAO/UNAIDS Best Practice paper, UNAIDS, Geneva.

FAO/Government Cooperative Programme, Project of the Government of Mozambique/FAO Unilateral Trust Fund/PROAGRI Outsourcing Operation (2002) Project Document.

IDA/IFC/MIGA (2003) Country Assistance Strategy for the Republic of Mozambique.

Government of Mozambique (2000) *National Strategic Plan to Combat HIV/AIDS: 2000–2002*, Mozambique.

ILO (2000) Action against HIV/AIDS in Africa, ILO, Geneva.

INDE, Ministry of Health (2002) *Impacto Demográ.co do HIV/SIDA em Moçambique* (Demographic impact of HIV/AIDS in Mozambique).

Ministry of Health (2003) Joint Annual Evaluation, 2003.

Mozambican Ministry of Health (2003) Ministério da Saúde: PEN ITS/HIV/SIDA – Sector Saúde 2004–2008.

Republic of Mozambique/United Nations (2002) Report on the Millennium Development Goals: Mozambique, Republic of Mozambique.

Romão F, Dgedge M (2002) *Avaliação das necessidades de género e saúde nos ditritos de Mocuba e Morrumbla* (Gender and need assessment in the districts of Mocuba and Morrumbla).

The World Bank (2001) *Impact of HIV/AIDS on Small and Medium Enterprises, Literature Review,* Public Enterprise Development Project, The World Bank, Washington, DC.

The World Bank (2002) Mozambique HIV/AIDS Response Project, The World Bank, Washington, DC.

The World Bank (2003) The World Bank in Mozambique, the World Bank, Washington, DC.

UNAIDS (2002) Report on the Global HIV/AIDS Epidemic, UNAIDS, Geneva.

UNAIDS/Economic Commission for Africa (2000) AIDS in Africa: Country by Country, UNAIDS/ECA, Geneva.

UNDP (2002) Mozambique Human Development Report 2001; Gender, Women and Human Development, UNDP.

UNDP (2003) Food Insecurity and HIV/AIDS in Southern Africa: The Mozambique Response, UNDP.

Verde Azul Consult Limitada (2001) *Impact of HIV/AIDS on the Education Sector in Mozambique*. MOZ 2000/801, UNICEF, Government of Mozambique and the Ministry of Education, accessible at <a href="http://www.unicef.org/evaldatabase/index\_14121.html">http://www.unicef.org/evaldatabase/index\_14121.html</a>