



“Kids in Kalikiliki”

We met these children when we were walking around taking photos one early morning. They were happy when we took their photo. We were happy too.

Photographers: Julius and Richard Zulu

2 ~ Zambia's policy environment

HIV and AIDS is a major development challenge facing Zambia and other developing countries. In the past, the epidemic was viewed mostly from a medical perspective, but it is now agreed that its impacts permeate the entire development fabric of societies. Wealth and health are intricately and unquestionably related (Hamoudi and Sachs, 1999, Bloom et al, 2000). Improved health promotes economic growth while poor health and poverty are mutually reinforcing.

The ability of Zambia to respond to HIV and AIDS is both supported and constrained by global and national trends. For example, developments in the global economy; the extent to which the benefits of globalisation are shared; and the extent to which both developed and developing countries deliver on international commitments. All of the above are important factors in the response to HIV and AIDS.

The greater burden however, is on a country itself to ensure macroeconomic stability, economic growth and the enhancing of participation of the poor in development. This is to lay the proper foundation for responding to the epidemic. Countries need to adopt sensible policy frameworks which should facilitate both broad development as well as the response to the spread of HIV and AIDS. Further, the policy frameworks should aim at enhancing the capacity of households to contribute effectively to the response to HIV and AIDS.

This Chapter sets the development and policy context for addressing HIV and AIDS issues. The question it explores is whether international and domestic environments are supportive to the country's response to HIV and AIDS. It provides an overview of the developmental challenges

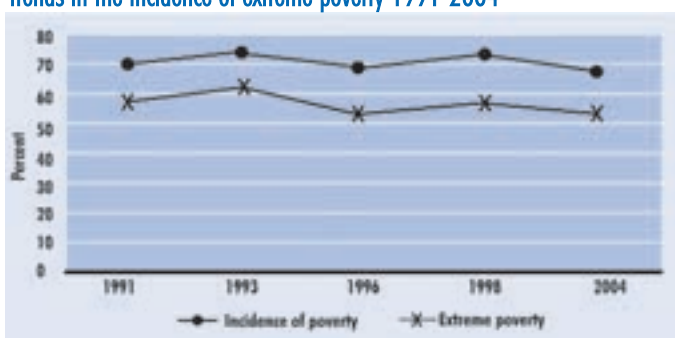
Zambia faces, and how the HIV and AIDS epidemic complicates the scenario further. Feeding the development challenges faced by Zambia in recent years, is the global economy whose recent developments are also discussed in the Chapter. The implications these circumstances have had for Zambia's development are also analysed. The Chapter further discusses the international and the national HIV and AIDS response. Finally suggestions have been made on how the policy environment could further be improved, to make the response to HIV and AIDS more effective.

Trends in Zambia's post-independence development

If it is admitted that poor health and poverty are mutually reinforcing, then there is little doubt that Zambia faces a huge challenge in halting and reversing the spread of HIV. More than thirty years of marginal economic growth has led to a human development crisis in almost every area of well-being. As shown in Table 1.1 on p. 21, nearly all the indicators that measure progress in attaining the Millennium Development Goals reflected very minimal improvements when compared to the base year of 1990.

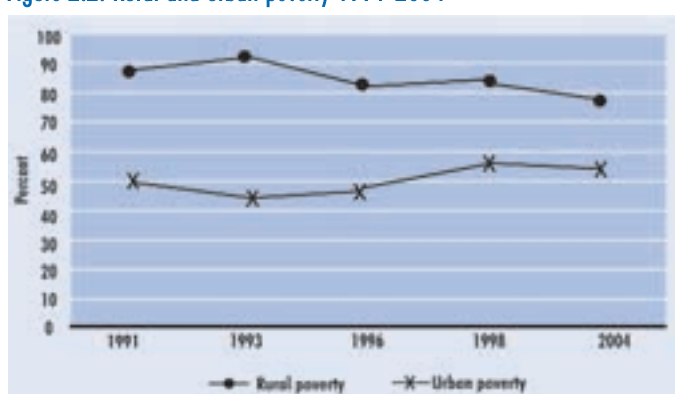
Further, according to UNDP Human Development Reports, the fall in Zambia's human development index (HDI) has been the sharpest among the developing countries (see Figure 5.1 on p. 71). Up to 1985, Zambia's HDI continued to rise despite the fact that the economy had been in decline since 1975 when copper prices collapsed. The adverse impact was cushioned by food subsidies and free social services. The HDI started to fall in 1990 such that by 1995, Zambia's HDI value was lower than it was

Figure 2.1: Poverty and trends in the incidence of extreme poverty 1991-2004



Central Statistics Office, Living Conditions Monitoring Survey, 2004

Figure 2.2: Rural and urban poverty 1991-2004



Central Statistics Office, Living Conditions Monitoring Survey, 2004

Table 2.1: Trends in extreme poverty, 1991-2004

	1991	1993	1996	1998	2004
All Zambia	58	61	53	58	53
Rural/urban					
Rural	81	84	68	71	53
Urban	32	24	27	36	34
Province					
Central	56	71	59	63	63
Copperbelt	44	28	33	47	38
Eastern	76	81	70	66	57
Luapula	73	79	64	69	64
Lusaka	19	24	22	35	29
Northern	76	72	69	66	60
North Western	65	76	65	64	61
Southern	69	76	59	59	54
Western	76	84	74	78	73

GRZ, 2005: Living Conditions Monitoring Survey, Table 12.8

in 1975. Zambia is the only country to experience such a reversal in the world.

Poverty is perhaps the most immediate factor that undermines household capacity to respond to HIV and AIDS (see Chapter 4). In Zambia poverty is extremely high, even though it was slightly lower in 2004 compared to its 1998 level (see Figure 2.1). Poverty levels have been consistently higher in rural areas than in urban areas. However, as depicted in Figure 2.2, the gap in poverty levels narrowed from 37 percent in 1993 to 27 percent in 2004. Urban poverty increased much more sharply than rural poverty. The two most urbanised provinces, Lusaka and Copperbelt, have the lowest poverty levels in Zambia. Extreme poverty peaked in 1993 in rural areas at 84 percent (see Table 2.1). By 2004, it had reduced to 53 percent. Extreme poverty levels had gone up in urban areas from 24 percent in 1993 to 34 percent in 2004. Obviously the economic downturn starting in the mid-1970s and the structural adjustment efforts of the 1980s and 1990s took a much sharper toll on the urban population. Unemployment escalated and real wages tumbled. Urban households also faced higher levels of the HIV and AIDS epidemic. Even though this was the case, rural communities continued to bear a greater poverty burden.

When the first HIV case was diagnosed in Zambia in 1984, the country's capacity to respond effectively was already seriously eroded by the declining economy. Zambia's economy has performed poorly since the mid-1970s leading to the human crisis and high poverty levels as reflected in Table 2.1. The sharp drop in the prices of copper in 1975 was the catalyst for the economic meltdown that followed. The main underlying cause seems to have been the poor economic management. In the first ten years of independence, Zambia had poor fiscal management. This resulted in chronic budget deficits due to high public spending on a wide range of subsidies. For political expedience, the Government failed to remove

Table 2.2: Selected macroeconomic indicators

Year	2000	2001	2002	2003	2004	2005	Avg.
Real GDP at 1994 prices (K billion)	2,499	2,621	2,708	2,847	2,989	3,141	2,800
Real GDP growth rate (percent)	3.6	4.9	3.3	5.1	5.4	5.1	4.6
Inflation rate (percent)	30.1	18.7	26.7	17.2	17.5	16.8	20.0
Interest rates (percent)	37.5	45.8	45.3	40.4	30.7	28.0	39.9

Central Statistical Office and Bank of Zambia

the subsidies when the mineral boom ended in 1975. The adoption of inward-looking policies made the country uncompetitive and inefficient

The Zambian Government for some time remained optimistic regarding the recovery of copper prices. However, by the beginning of the 1980s, it had become plain that the fall in copper prices was not a short-term development. In any case, the fall in copper prices had already devastated the Zambian economy that was overly dependent on copper exports.

Steps to reform the economy were initiated in 1981. Efforts were made to gain macroeconomic stability, through a more prudent management of public expenditure and infusion of economic efficiency. Market-based incentives were initiated with the sponsorship of the World Bank and the International Monetary Fund (IMF).

However, throughout the 1980s, there was little domestic consensus on reforms. They were seen as externally imposed. In May 1987, for example, the IMF programme was suspended after food riots linked to opposition to removal of food subsidies. The programme was restarted in 1989 when it became obvious that the economy sank further into crisis without external help.

With the change of government in 1991 and the abolition of the one-party governance system, a more radical reform agenda was adopted by the new government. The aim was to regain macroeconomic stability. Tight fiscal and monetary policy, liberalisation of financial markets, elimination of chronic budget deficits, a complete liberali-

sation of the exchange rate regime and the elimination of import controls were among the key measures that were embarked on. Sector reforms were also adopted through a sector-wide approach in agriculture, health, education, environment and roads.

The new government also embarked on a serious agenda to privatise state enterprises. The immediate impact of these reforms, however, appeared to sink the economy further into crisis. High rise in inflation and interest rates as well as the rapid depreciation of the Kwacha characterised the economy of the nation. The economy stagnated with GDP growth averaging about 1 percent in the 1990s. The incidence of poverty worsened between 1991 and 1998 (see Figure 2.1).

Better prospects have emerged in recent years. These have yielded good results and brightened the environment for tackling the spread of HIV and AIDS. In particular, Zambia has posited uninterrupted economic growth for seven years since 1999, the longest uninterrupted growth period since Independence (see Table 2.2). Between 2000 and 2005, the economy grew at an average annual rate of 4.6 percent.

The growth in 2000 and 2002 was slow at 3.6 and 3.3, respectively. This was attributed to enduring negative factors of the 1990s. The factors included the mishandling of the privatisation process, especially of the mines. Other factors related to low copper prices and production, poor macroeconomic management and public service corruption. In 2002, the slow growth rate was largely due to the effects of the drought the country suffered in that year.

Since 2003, the economy has grown at over 5 percent every year. Agriculture has also posted positive growth rates. The rates were above 5 percent in both 2003 and 2004, though only 2.8 percent in 2005 due to a partial drought. Projections for 2006 indicate that the economy might grow above 7 percent, the highest rate of growth reached since the 1960s.

There has been a drop in inflation between 2000 and 2005. From an annual average of 30.1 percent in 2000, inflation declined to 16.8 percent in 2005. This declined further to 8.2 percent in August 2006. Interest rates, however, have not fallen at the same pace averaging 28 percent in 2005 and hovering around 20 percent in August 2006. Prospects for sustaining the single digit inflation rate were high in 2006 given the good harvest, expected to continue having downward pressure on food prices. Food prices have the biggest weight in the country's consumer price index. The exchange rate has been volatile, which after some time of stability between 2002 and 2004 appreciated rapidly in 2005 by about 30 percent. GDP growth has only averaged 4.6 percent between 2000 and 2005, less than the 7 percent needed to make a significant impact on poverty reduction. Nevertheless, the macroeconomic development discussed above have brought renewed hope that full macroeconomic stability is now possible and Zambia may soon return to a sustainable growth path.

In terms of poverty reduction, these macroeconomic developments will not favour the poor. The recent Kwacha appreciation in particular, by threatening the growth of the non-traditional exports which tend to be labour intensive, will lead to a rise in unemployment. Small farmers who grow export crops such as cotton, paprika and tobacco have been adversely affected. The overall impact of the macroeconomic environment on agriculture which absorbs most of the poor people is anticipated to be negative.

Zambia and the global economy

The global policy and economic environment pose challenges to Zambia's effort in responding to the spread of HIV. The unfavourable trade environment continues to disadvantage developing countries. Heavy agriculture subsidies in developed countries undermine the ability of the developing countries to compete favourably in agriculture trade. Subsidies are hurting development prospects of the developing countries and their effort to reduce poverty and respond to calamities such as HIV and AIDS. Trade in services and manufacturing is also heavily tilted towards developed countries. The lack of a more favourable outcome at the previously held World Trade Organisation ministerial conference was a big blow to Zambia's aspirations.

An improved trade regime will not, however, automatically raise market access for Zambia. This is due to a number of reasons. First and foremost, Zambia is a landlocked country. The nearest functioning sea port is over 2,200 kilometers away from the capital, which entails that exports are uncompetitive on the basis of transportation costs alone. This is worsened by the poor road infrastructure especially in rural areas, an inefficient railway system and inadequate airfreight services.

The stringent sanitary and related requirements for agriculture exports in developed countries and the inadequate capacity in Zambia to meet such requirements is another serious obstacle to market access. Other constraints, such as lack of finances and the high cost of production, means that Zambia is unable to produce the right amount of quantities and standards to consistently assure importers abroad.

A number of opportunities have, nevertheless, emerged in the last five years. These may have a positive impact on Zambia's development effort. The first is the relatively better global economic performance in the last few years, which in turn started to have positive effects on Zambia's domestic

economy. After a sluggish start at the beginning of the new millennium, the global economy weathered the 2001 September 11 attack on the World Trade Centre in New York. It began to pick up in 2002 with GDP continuing to grow through 2005. From 2003 to 2005, the rate of growth rose at an average of 4.5 percent compared to 2.1 percent in 2000 to 2002.

Noteworthy is the widespread nature of this growth, with Western Europe alone recording sluggish performance. The 4.4 percent average growth of the sub-Saharan Africa economy was a breath of fresh air given past chronic underperformance. After about a decade of sluggish economic performance, the Japanese economy saw an upturn, growing at an average rate of 3.8 percent and was an important factor in the upswing of the global economy.

The Chinese and Indian economies, which grew at an average rate of 9 percent and 7 percent between 2003 and 2005 respectively, were also an important factor in the upswing of the global economy. The significant rise in world trade was the main driver of the good performance recorded in the world economy. World trade grew at an average rate of 8.5 percent, about twice the rate of growth of the world economy.

Growth has also been anchored by global economic stability seen in subdued rates of inflation, with the average hovering around 2 percent.

World economic growth, particularly in China and India, has spurred high demand for oil and non-oil minerals with prices rising to record high. Oil prices rose by 28.9 percent in 2004 and by August 2005 oil prices had risen by 60 percent, reaching US\$70 per barrel. Although not as dramatic, non-oil mineral prices also rose by 16.8 percent in 2004 and further by 27 percent in 2005.

In 2005, there were price increases of industrial metals, such as iron ore (up by 72 percent), zinc (up by 38 percent), and copper (up by 21 percent). Of major interest to

Zambia has been the rise in copper prices (see Figure 2.3). After falling from an average of 91.5 US cents per pound between 1995 and 1999, the price of copper declined further to 66.7 US cents in 2002 before starting to rise again. Copper prices reached 207.4 US cents per pound in December 2005.

The impact on Zambia of these global economic trends is direct. With rising copper prices, there has been a rise in new investments in the copper mines. This has boosted copper revenues from US\$423.7 million in 2001 to US\$1,616 million in 2005. This is complimented by the rise in non-traditional exports from US\$249 million in 2001 to US\$545 million in 2005. The ratio of total merchandise exports to GDP has increased from 23.6 percent in 2000 to 33.2 percent in 2004. The share of non-traditional exports in total exports, after rising to 38.5 percent, declined again to 25.2 percent in 2005 due to the resurgence in mineral exports.

Despite the good performance, the global economy remains fragile. High on the list of factors threatening growth is the high oil prices. There are concerns that oil prices will rise further given the volatile political environment in the Gulf region and the constant disruptions to oil supply in Nigeria. The fiscal deficits in the United States (US) economy, which have led to low US saving rates and current account deficits on one hand and the high current surpluses in Asian economies, particularly in China, threaten global financial markets.

Figure 2.3: London Metal Exchange copper prices 1991-2005 (US cent/lb)



GRZ, Macroeconomic Indicators, various issues

In April 2005 Zambia attained the Heavily Indebted Poor Country completion point. This saw her external debt stock reducing from US\$7.2 billion to US\$3.5 billion. Further, debt write-off under the G8 Gleneagles Initiative and the Multilateral Debt Relief Initiative have reduced the debt stock to less than US\$600 million. Reduced debt servicing requirements, significant rise in copper prices, a jump in copper production, rise in foreign direct investment and

the increase in non-traditional exports led to the appreciation of the Zambian Kwacha by about 35 percent in 2005.

It is clear that Zambia must take advantage of the positive outcomes in the global economy to lay a solid foundation, which will help the country withstand the external shocks when they come. Improvements in market access are required if Zambia is to turn the positive global developments into beneficial outcomes for her domestic eco-

Box 2.1: National policies and action against HIV and AIDS

Since the first case of HIV and AIDS was reported in 1984, the Government of the Republic of Zambia has put in place a national HIV and AIDS policy and various prevention programmes. The programme started in 1986 with the establishment of the National HIV and AIDS Prevention and Control programme, which formulated short and medium term plans that set priority operational areas. In 1999, the National HIV and AIDS Council (NAC) was created. This semi-autonomous, multisectoral body developed a National HIV/AIDS/STI/TB Strategic Intervention Plan (2002-2005) and also facilitated the formulation of the HIV and AIDS policy. The plan incorporates a mechanism for multisectoral co-ordination and collaboration that provide many interventions on prevention, treatment and care.

The epidemic has been mainstreamed by all sectors including public, private, non-governmental, religious and traditional groups as well as civil society. Thus, there are also specific sector policies on HIV and AIDS. These various HIV and AIDS activities have also been supported by appropriate budget-lines. Such have included programmes on HIV and AIDS at workplaces. In addition, the country has developed care and management guidelines on HIV and AIDS and operationalisation of the system. The political leadership has continued to respond to the epidemic in various ways, notably through regular references to the social, economic, and health impact.

Other efforts in addressing the epidemic have included: the Zambian Parliament passing the NAC Act in 2002; establishing a Cabinet committee on HIV and AIDS; mainstreaming HIV and AIDS in the Poverty Reduction Strategy Paper, the Transitional National Development Plan and the Fifth National Development Plan; establishing HIV and AIDS sub-committees (task forces) under the Provincial and District Development Co-ordinating Committees; providing antiretroviral therapy in public hospitals. Most recently the Government has moved to decentralise the free distribution of ARVs to district levels. The Government has also endorsed the global World Health Organisation 3 by 5 strategy. Other positive measures in addressing HIV and AIDS are the establishment and expansion of voluntary counseling and testing and prevention of mother-to child transmission of HIV programmes to district levels, support to home-based care programmes, incorporation of nutritional programmes as part of care and support of people living with HIV and AIDS and the provision of condoms and drugs for sexually transmitted infections. There are also currently drives to support local remedies.

Other strategies worth noting are establishment of bottom-up planning process in all the districts; building community competencies by all stakeholders and fostering co-ordination efforts at national and community levels; youth involvement in HIV and AIDS programmes; establishing resource mobilisation strategies; initiatives by the transit communities (such as truckers, farmers and sex workers; malaria supportive programmes for people living with HIV and AIDS; and existence of monitoring and evaluation plan to track the response. Such plans also come in the form of annual review programmes.

UNDP/MFNP, 2005: Millennium Development Goals, Zambia Status Report, 2005

conomic development. Zambia should work with other least developed countries to pressure developed nations to open their markets especially in agriculture trade.

It is also imperative that Zambia makes serious investments to build capacity in trade. Prudent macroeconomic management of low inflation and a stable currency should be given high priority. For example, the sudden appreciation of the Kwacha in 2005 arising from some of the positive global economic trends hurt exporters of non-traditional exports, who in the first place mitigated the slump in the country's copper export revenues of the 1980s and 1990s. This has not been helped by swings in 2006 of the Kwacha, which is making it difficult for both importers and exporters to plan for their business.

The global policy environment

The relatively good performance of the global economy analysed above has been complimented by efforts to create an international alliance to help developing countries halt the spread of major diseases. A number of international conferences have adopted commitments to this end.

Millennium Declaration and the MDGs

The first of these commitments is the Millennium Declaration adopted in September 2000 by 147 heads of State and Government and 44 representatives at the UN Millennium Summit in New York. The Declaration outlined the intent of the international community to take aggressive steps to tackle the problems of poverty and major diseases, afflicting a big part of the world's population. A central challenge of turning globalisation into a positive force for all the people of the world was recognised. Thus, based on six fundamental values that need to characterize the 21st Century - freedom, equality, solidarity, tolerance, respect for nature and, shared responsibility - the world leaders committed them-

selves to freeing the more than one billion people of the world facing abject poverty

The Millennium Declaration adopted a set of inter-connected and mutually reinforcing development goals. Follow-up action by the United Nations Development Group in collaboration with the OECD, World Bank and the International Monetary Fund connected these to other internationally agreed goals and set targets and indicators for each goal. This framework of eight development goals was then designated "Millennium Development Goals" (MDGs).

The sixth MDG, the theme of this report, focuses on tackling HIV and AIDS, malaria and other major diseases. The seventh target commits national governments, including Zambia to "have halted by 2015, and begun to reverse, the spread of HIV and AIDS".

International conferences

The second part of the 1980s was characterised with dramatic years altering international diplomacy. The period saw the end of the Union of Soviet Socialist Republics, the fall of the Berlin Wall leading to the unification of East and West Germany and the end of the cold war. The resulting peace dividend was now expected to free the attention of world leaders and increase their commitment to uplifting the welfare of people in poor nations without the disruptions of cold war politics.

With this opportunity presented, a number of international conferences that helped to galvanise the spirit of co-operation on development have been convened since the 1990s. The 1990 World Summit for Children pioneered the holding of international conferences at the heads of State and Government level.

Taken together, the conferences have helped to shape world thinking on key issues of development - environment, gender, social development, human rights, food, housing, and HIV and AIDS - and put them at the top of the global agenda.

Although there is no universal prescription for successful development, the conferences reflect the growing convergence of views that democracy, development and respect for human rights, including the right to development, are interdependent and mutually reinforcing. By the mid-1990s, these views had been sufficiently espoused and a general consensus had emerged.

A number of international meetings have been held in the current decade since the Millennium Declaration to entrench MDGs even further. In June 2001 the UN General Assembly Special Session adopted a Declaration of Commitment to take action against HIV and AIDS. The Declaration of Commitment is considered a road-map for achieving the Millennium Development Goal of halting and reversing the HIV and AIDS pandemic by 2015. It sets out specific commitments participating Governments will work to fulfil. This includes prevention campaigns, reducing stigma, building infrastructure, providing necessary resources, and ensuring treatment, care and respect for people living with HIV and AIDS.

Efforts to make the global economic environment fairer to least developed countries (LDCs) have also continued. At the Third UN Conference on LDCs, held in Brussels in May 2001, 193 participating governments committed themselves to end the marginalisation of the poorest countries of the world and improving the quality of lives of the more than 600 million people who live in the LDCs, by beneficially integrating them into the global economy.

This was followed by the International Conference on Financing for Development in March 2002 in Monterrey, Mexico, which explored ways of mobilising domestic and international resources to finance the development challenges mapped by previous conferences. The Monterrey Consensus tackled six themes important to the increase of resource flows in developing countries: i) Domestic financial resources; ii) foreign

direct investment and other private flows; (iii) international trade; (iv) international financial and technical co-operation; (v) debt relief; and (vi) systemic issues that focused on reforming the international architecture.

The Paris Declaration on Aid Effectiveness

In March 2005, the Organisation for Economic Cooperation and Development (OECD) countries adopted the Paris Declaration meant to improve aid effectiveness in developing countries. The Declaration adopted 12 indicators and targets to be achieved by 2010 by OECD countries in five areas of aid - ownership, alignment, harmonisation, management and mutual accountability.

In Zambia, donors had started to make progress on these issues, particularly on harmonisation, already before the adoption of the Declaration. Seven like-minded donors - the United Kingdom, Netherlands, Ireland, Sweden, Denmark, Finland and Norway - signed a memorandum of understanding (MoU), with the Government of the Republic of Zambia on aid harmonisation in March 2004. Several other donors, including Germany, the UN system and the World Bank, have since then appended their signatures to the MoU which focuses on issues such as the need to adopt similar financial disbursement modalities and reporting and monitoring arrangements. This development is important for aid management in general and HIV and AIDS resources in particular.

Specifically, the MoU requires that: (i) Reporting and monitoring systems should be country owned and led; (ii) Donors should rely on a single reporting system within a given supported sector for similar activities; (iii) Donors should work towards reaching consensus with the Government on common formats, content and frequency for periodic reporting; (iv) Scaling down the "mission" approach to reporting and monitoring; (v) Building Government

capacity for reporting and monitoring; and, (vi) Donors to rely on Zambia's financial reporting system.

Debt relief

Some of the outcomes of the policy developments discussed above have benefited Zambia immensely. In particular, debt relief and commitment of the leaders of industrialised nations pronounced at the G8 Summit have answered to the concerns voiced at the UN conferences. This development is important for Zambia as it means that resources previously spent on debt servicing could now be deployed to the response to HIV and AIDS and other urgent developmental needs. The UN conferences particularly helped to galvanise world opinion in favour of total debt cancellation and increased aid, as seen from the pressure mounted by Band Aid that signalled the concern of ordinary people in developed countries.

Debt relief at the time when copper prices are soaring is expected to give some boost to the Zambian economy. However, the levels of poverty, at 68 percent in 2004, are so high that the Fifth National Development Plan suggests that the country's economy must grow consistently for the next 25 years, at more than 7 percent for poverty to significantly drop. This will also depend on the nature of growth. If it is driven by mining alone it will not be broad based enough. Majority of the Zambians will be bypassed by this growth. Therefore, the global developments recounted above must be augmented by pro-poor policies if they are to benefit the majority of Zambian households.

The challenge of development in the context of HIV and AIDS

The challenge of development in Zambia has always been daunting and now HIV and AIDS is immensely complicating the situation. The epidemic affects every fabric of

human existence and economic development. Various studies provide evidence on the high economic costs of HIV and AIDS.

Regrettably, the techniques for estimating the economic cost of the epidemic have not yet been refined because evidence for the nature of the impact at different levels is not yet fully established. However, there have been attempts to map the mechanisms through which the economic and social impacts of HIV and AIDS are transmitted from households to sectors and macro level in general.

Transmission mechanisms

HIV infection in an individual is the epicentre, the starting point of a chain of impacts. There are key relationships before infection that predispose certain categories of the population to susceptibility. Two examples illustrate the point.

First, poverty - by driving some people into risky behaviour such as sex work - is a key factor in the spread of HIV. Secondly, more women than men are infected with HIV. This is due to unequal social and economic power in society (see Chapter 3). Therefore, addressing poverty and existing gender disparities are important responses in arresting the spread of HIV even though not the only ones.

After infection, HIV and AIDS induces another chain of key relationships that defines the individual's or household's vulnerability and resilience. Most immediate impacts of the disease are at household and community levels. Families face immediate loss in income earnings due to increasing health care costs because of the sickness. AIDS-related death, if the family member was a breadwinner or contributed to income generation, leads to further and permanent loss in income.

The AIDS epidemic is deepening the vulnerability context of Zambia's societies. Households often have to divert resources (time, finances and productive assets due to distress selling) in order to care for the

chronically sick foregoing productivity in the process. Therefore, societies that once coped well with droughts and other natural shocks are now easily thrown into destitution because resilience against shocks has been seriously undermined by the epidemic. Social safety nets, such as the extended family system, have been regarded as Africa's first line of defense and resilience against shocks. These safety nets have now been overstretched and seriously weakened by the pandemic.

The impacts of HIV and AIDS at household level are not gender neutral as it is women that often have to bear a bigger burden such as caring for the sick and the rising number of orphans (see Chapter 3).

Impacts on the health sector

Zambia's health systems, the very frontline in the action against the HIV and AIDS pandemic are clearly overburdened by the epidemic with the quality of health care being compromised in the process (University of Zambia, 2005a). For example, the health system can no longer afford to isolate tuberculosis (TB) patients because the number of cases has increased drastically due to HIV and AIDS, outstripping available facilities. This has necessitated the need for innovative approaches in the treatment of TB, placing emphasis on household supervision to enhance adherence to treatment. AIDS-related diseases are clearly diverting resources from other diseases. As much as 65 percent of hospital space in some cases is allocated to HIV and AIDS related cases.

Impacts on the education sector

There have been immense direct and indirect costs on education. Studies seem to indicate that this is probably the most hit sector (University of Zambia, 2005b). Teachers are dying at an unprecedented rate. In 1998, 1,300 teachers died mostly due to HIV and AIDS, two thirds of all newly trained teachers. This is complicating

progress in lowering class sizes as the number of teachers is declining.

Children are being taken out of school to look after sick parents or help with income generation. There have been enormous psychosocial effects even for the children that remain in school but are having to cope with the impacts of HIV and AIDS at home while sometimes facing stigma in the school (Kelly, 2000). The quantity and quality of services, skills and personnel are being lost at a very critical point.

Impacts on the agriculture sector

The sector impacts of HIV and AIDS on agriculture are more directly connected to the household for most people in the rural areas. The Poverty Reduction Strategy Paper 2002-2004 declared agriculture as the engine of growth and key to Zambia's development as well as the reduction of wide spread poverty. It absorbs 67 percent of the country's labour force and is the main source of income for the majority of the Zambian people. Primary agriculture production contributed on average 16 percent to GDP between 1994 and 2005. Value added from agro-processing industries will add another 8 percent to GDP to raise the average to 24 percent.

Agro-processing industries which directly depend on agriculture constitute 75 percent of Zambia's manufacturing. Agriculture is therefore very important to urban employment as well. As a result of the phenomenal increase in agricultural exports, the contribution of agriculture to balance of payments is on the increase.

It is well documented that the potential for agriculture to grow and spur economic development in the country is huge. However, agriculture performance is under threat by HIV and AIDS from a number of angles. The loss of labour as a result of death or chronic illness and the labour tied to care is leading to reduction in the area under cultivation (University of Zambia, 2005c). There are also declines in yields.

There is further evidence that livestock accumulation is being affected, due to distress sales. In addition, the loss of extension workers is negatively affecting the provision of information to farmers. Farmers are also faced with a limitation of receiving and passing on information at household level. Often when the head of the household dies, this equates to the loss of the most knowledgeable and experienced farmer in the family, affecting negatively the inter-generational transmission of skills.

A change in cropping patterns to the less labour intensive crops (mainly food rather than cash crops) is also being observed. Households are reverting back to subsistence farming. Overall, the ability to recover from natural shocks such as drought and floods is seriously being eroded. At the national level, this is leading to chronic dependency on food imports, which in turn affect negatively the agriculture sector in the way relief food depresses prices of agriculture commodities.

Impacts on the business sector

The Zambian business sector has not been spared by the epidemic. HIV and AIDS is increasing expenditure for business as well as reducing revenue.

One study found that the main causes of ill health at workplaces were those often associated with the HIV and AIDS pandemic, with TB accounting for 46.8 percent and diarrhea 12.9 percent (Garbus, 2003). Employers incurred an average of US\$13 per episode of illness. Other HIV and AIDS related costs included productivity losses, paid sick leave, cost of replacing labour and absenteeism.

It is not known yet how industries have responded but it is assumed that as reliability of labour becomes more uncertain while its costs shoot up, employers will change their techniques of production to become more capital intensive. This will lead to a reduction in the ability of the Zambian economy to create employment.

Conclusions

It is clear from the foregoing that HIV and AIDS is a huge challenge to development. There can be no business as usual. In seeking to respond to this challenge, the following need to be considered:

- 1) Come up with strategies to prevent new infections.
- 2) Design development projects appropriately taking into account the constraints the epidemic imposes on effectiveness.
- 3) Design programmes to address specific problems brought about by HIV and AIDS including the need to take care of children orphaned by AIDS as well as those that are vulnerable.
- 4) Mitigate the effects of HIV and AIDS on poverty.