Chapter 1

Introduction

Developing countries in the African, Caribbean and Pacific regions have been struggling for decades to meet the traditional developmental challenges they faced alongside a rapidly increasing population. In more recent decades a new challenge has arrived on the scene which at first was not fully recognised for the threat that it was. This challenge was the human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS). HIV causes AIDS, a disease that causes a slow and progressive collapse of the immune system. The focus of this book will be on the impact of the HIV/AIDS epidemic on the small countries of the three regions. While there is no universally accepted definition of a small country, since the work of Jalan (ed., 1982) it is customary to measure size by population or land area. The Commonwealth Secretariat uses a population of 1.5 million.

In the regions under review, there are countries with populations of less than 100,000 people; some in the Caribbean have populations below 30,000. There is an emerging literature that addresses the vulnerability of these small states, the focus normally being the threat of exogenous shocks – usually problems in export markets.[1] However, in the Caribbean, for example, the Grenada experience of hurricane Ivan in 2004 was a stark demonstration of what can happen to a small country in the face of natural hazards. In many parts of the country most of the homes were completely demolished, and country's economy virtually came to a halt. It can be argued that, in many ways, similar small-country vulnerability prevails in the presence of a widespread epidemic.

These small states face challenges that include the struggle to raise per capita incomes, increase employment, reduce poverty and increase the overall standard of living of the general population. For small countries, such issues are usually examined within the context of a limited and narrow range of natural resources, poor governance practices, inefficient and under-developed institutions, sometimes inappropriate involvement of the public sector in the market economy and improper macroeconomic policies. Since the 1970s, the governments of these countries have been working with the International Monetary Fund (IMF) and the World Bank in order to deal with these issues.

The decades of the 1980s and the 1990s were therefore, for many small countries, decades of structural adjustment. However, the scale of the new challenges presented by HIV/AIDS is now becoming apparent. Table 1.1 presents a snapshot of the dimension of the HIV/AIDS epidemic worldwide.

Table 1.1 HIV/AIDS statistics worldwide, 2008

HIV/AIDS statistics	*Estimate (millions)*	*Range (millions)*
People living with HIV/AIDS	33.4	31.1–35.8
Adults living with HIV/AIDS	31.3	29.2–33.7
Women living with HIV/AIDS	15.7	14.2–17.2
Children living with HIV/AIDS	2.1	1.2–2.9
People newly infected with HIV	2.7	2.2–3.2

Source: UNAIDS/WHO, 2009

As Table 1.1 shows, by the end of 2008 the estimated number of people living with HIV and AIDS worldwide was 33.4 million (UNAIDS/WHO, 2009). Every day almost 7,400 people become infected with HIV and more than 5,400 people die from AIDS, mostly because of inadequate access to HIV prevention and treatment services. It is known that since the early 1980s when AIDS was first identified, more than 25 million people have died from this disease (UNAIDS/WHO, 2009).

Moreover, whereas the epidemic claimed the lives of 1.5 million people in the 1980s, in the subsequent decade it claimed 15 million more lives, and it is estimated to have claimed a further 22 million lives as at the end of 2008 (UNAIDS, 2009). On a global scale, therefore, the rate of increase in deaths between the first and the second decade was 900 per cent and the projected rate of increase for the present decade is at least an additional 134 per cent.

Table 1.2 presents the data in more detail, with information on specific regions of the world. The data from 2008 is compared with data from 2001, the latter shown in parentheses.

Initially HIV/AIDS was seen as mainly a health issue, and the focus of government was on its ability to channel resources to deal with those infected by the disease and its ability to finance the health and medical expenditure related to the epidemic. However, as our understanding of the epidemic

Table 1.2 Global HIV/AIDS – the regional picture

Region	*Adults and children living with HIV/AIDS 2008 (2001)*	*Adults 15+ living with HIV/AIDS 2008 (2001)*	*Adults 15–49 prevalence rate 2008 (2001)*	*Women 15+ living with HIV/AIDS 2008 (2001)*	*HIV/AIDS deaths 2008 (2001)*
Global	33.4M (29.5M)	30.8M (27.9M)	0.8 (0.8)	15.5M (14.1 M)	2M (1.7 M)
Sub-Saharan Africa	22M (20.4M)	20.3 (19.1M)	5.0 (5.7)	12M (11.2M)	1.5M (1.3M)
East Asia	740K (490K)	730K (490K)	0.1 (0.1)	200K (130K)	40K (15K)
Oceania	74K (25K)	73K (25K)	0.4 (0.2)	22K (NA)	1K (NA)
South and South East Asia	4.2M (4.2M)	4.1M (4.1M)	0.3 (0.4)	1.5M (1.5M)	340K (250K)
Eastern Europe and Central Asia	1.5M (650K)	1.5M (650K)	0.8 (0.4)	460K (180K)	58K (NA)
Western and Central Europe	730K (610K)	730K (610K)	0.3 (0.2)	200K (160K)	8K (9.6K)
North Africa and East Asia	380K (300K)	350K (280K)	0.3 (0.3)	190K (150K)	27K (22K)
North America	1.2M (1.1M)	1.2M (1.1M)	0.6 (0.6)	250K (190K)	23K (18K)
Caribbean	230K (210K)	220K (200K)	1.1 (1.1)	110K (92K)	14K (15K)
Latin America	1.7M (1.4M)	1.7M (1.4M)	0.5 (0.5)	550K (450K)	65K (47K)

Note: M – millions; K – thousands; and NA – not available
Source: UNAIDS (2009)

improved, it became clear that HIV/AIDS is more than a health problem. There is now widespread acknowledgment that HIV/AIDS is one of the single most important development problems facing the countries of the world. In other words, it is now agreed that early responses to the epidemic were medical in nature and it was treated primarily as a health crisis. The national response was thus one largely focused on providing health services for persons living with HIV/AIDS (PLWHA) and on seeking to prevent new infections. As knowledge about the impact of HIV and AIDS grew, the concept of the nature of the crisis posed by the disease shifted from its being a medical to a multisectoral crisis.

In this sense, HIV/AIDS came to be regarded as having a different kind of impact when compared with other diseases. The truth is that unlike most diseases, which target the very young and the very old, in the case of HIV/AIDS it is productive adults (that is, persons in the age group 15–49 years) who are most at risk of infection. This means that death and illness have a direct impact on production, with micro impacts at the household and firm or enterprise levels, as well as macro impacts at the national and regional levels.

Small developing countries generally tend to be serviced by a dual economy, where the traditional agricultural sector provides surplus labour and capital to the non-agricultural sector for its surplus creation and expansion. This was the duality first presented by Arthur Lewis (1954). In this context, HIV/AIDS can be seen as first attacking the very foundation of growth and development by the weakening of the labour force and the 'enforced' redirecting of financial resources to deal with the epidemic. For some countries, there is no question that with respect to labour, the HIV/AIDS attack is felt most in respect of these countries' qualified and skilled labour. It is well known that this is one area where scarcity is virtually the norm. It is also no doubt true that for other countries or regions, the labour impact would be on specific sectors. In sub-Saharan Africa, for example, HIV/AIDS has been having a significant impact on the agricultural sector. This is not surprising given the scale of the agricultural sector in the economies of this region. Moreover, as Alex de Waal and Alan Whiteside (2003) have shown, HIV and AIDS in the rural sector carries the risk of causing famine by significantly changing the pattern of vulnerability to famine.

What is clear is that any external or internal shock that further reduces a country's limited stock of human capital will have a far-reaching impact on both the agricultural and non-agricultural sectors of the economy. The non-agricultural sector will have a severe impact given the fact that its growth and development depend on its own labour and resources, as well as on the surplus transferred from the agricultural sector. However, faced with HIV/AIDS, the declining agricultural sector is likely to become the 'Achilles heel' of the non-agricultural sector, leading to stagnation of the entire economy and providing a recipe for social distress.

At the micro level, there is a different set of problems that households face. HIV/AIDS generally tends to affect the working-age population at the most productive period of its life. Thus, households become highly vulnerable given the loss of any of their breadwinners. In many cases, there is only one breadwinner. The epidemic can also lead to a diversion of financial resources, with children dropping out of school, thereby undermining the very social order that the development programme aims to promote. It should also be noted that the epidemic also has a profound gender impact. Women and girls are often forced to act as caregivers, reducing the income-generating activity they can undertake, as well as reducing their agricultural activity and their schooling. HIV and AIDS in the household also raises expenditure in areas such as healthcare costs and funeral costs. It also affects firms because of the cost of hiring labour to replace lost labour, both in instances of illness and death. Moreover, all of this will be taking place while income and sales are being lowered by the epidemic.

Taking a theoretical perspective

While the traditional neoclassical theory of production has examined the contribution of land, labour and capital in the growth process of a country, more recent studies of the economic growth and development process have emphasised the critical role of human development (Haq, 1995; Sen, 1996). For developing countries, the existence of limited natural resources means that emphasis must be placed on human resources development (HRD) in national development strategy formulation. Through education and training (and health and nutrition), HRD can overcome imbalances in the labour market. However, even with these recent findings, economic theory has not considered the impact diseases could have on economic growth and development via their impact on all the variable factors of production. We will now present a preliminary exploration of the link between ill health and economic growth.

Consider the Cobb-Douglas production function of an economy, revised to take human capital into account. Such a function can be stated as follows:

$$Y(\theta) = (K(y, \theta))^{\alpha} \times (H(y, \theta))^{\beta} \times (G(y, \theta))^{\mu}$$

where:
Y = national output
G = government expenditure
H = nations' human capital
K = physical capital
θ = physical capital IDS prevalence rates
y = output per capita

Assuming constant returns to scale, we will have $\alpha + \beta + \mu = 1$

Using this modified production function, one might examine how the scaling down of the variable factors of production by the prevalence rates impacts on the final output. The challenge in most cases will be data. An earlier study by Theodore (2001) provides a narrative of the mechanisms and transmission channels in which HIV/AIDS affects the economy. In this study, Theodore describes four channels, namely the production channel, the allocation channel, the distribution channel and the regeneration channel. Through the **production** channel, the disease affects the factors of production, namely, labour and financial capital. Through the **allocation** channel, the disease distorts optimal resource allocation in an economy as it results in deploying of resources to deal with the epidemic. Through the **distribution** channel, the epidemic further widens the gap between the poor and non-poor. Lastly, by means of the **regeneration** channel, investments in human capital, physical capital and new technology are needed to keep the economy growing. Since it is quite likely that the HIV/AIDS epidemic will compromise the savings capacity and the human capital of the economy, the desired economic regeneration will not take place.

Figure 1.1 portrays the relationship between HIV/AIDS and the economic system. As the diagram shows, the epidemic has the potential to destabilise the economic system because it impacts on the foundation pillars on which the production of the society is built – the labour force and the accumulation of savings. What is more, the epidemic has the potential to keep the health financing system in a permanent state of disequilibrium. In short, it erodes productivity, consumes savings, increases expenditure and reduces income. The devastation does not end here, however, for with every increase in the rate of prevalence, the negative impact worsens.

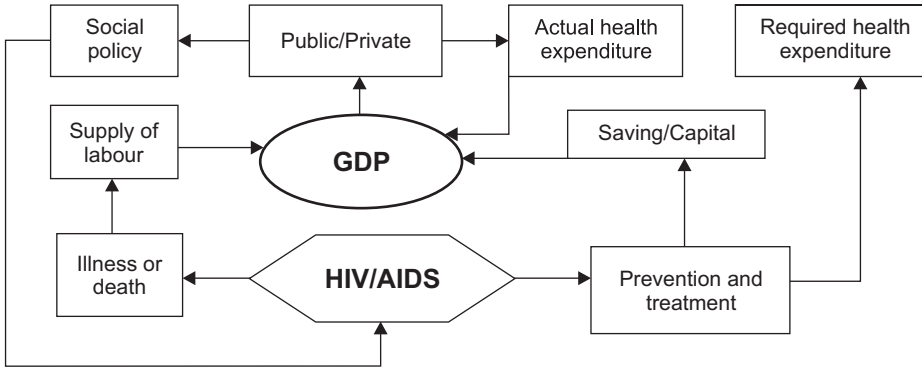

Figure 1.1 HIV/AIDS and the economic system
Source: Theodore (2001)

Figure 1.1 highlights the vulnerability of small economies to an epidemic like HIV/AIDS. The reality of the situation is that we would normally be dealing with a fledgling savings base, dominated by public savings. In countries where reliance is mainly on the public sector, the diversion of resources to prevention and treatment, as portrayed in the diagram, can be crippling. A similar point can be made in respect of the labour supply pillar on which the national income rests. It must be kept in mind that for some countries in the Caribbean, population levels are below 30,000 persons. One of the features of these small economies is that some thriving businesses are directly dependent on the passion and the drive of specific **individuals**. In these circumstances, indispensability and size become entwined. The illness or death of key individuals can have a woeful impact on the productivity of individual businesses and a ripple effect on related businesses.

There exist a number of studies that examine the impact of HIV/AIDS on the economy (Dixon et al., 2002; Cornia and Zagonari, 2002; Bonnel, 2000; Theodore et al., 2000). However, there is a dearth of studies that examine in detail the impact on particular sectors and which reflect the peculiar features of these countries. Countries in all three regions in the present study have both commonalities, as well as differences. The countries are all in the early stages of growth, with many problems of differing severity. For example, migration rates are high in the Pacific, Caribbean and Southern African regions. Together with weak government fiscal positions in the study countries of the three regions, the economic growth rates also tend to be low in these regions. At the same time, the Pacific and the Caribbean regions experience high tourist inflows, which although good for the economies presents an added dimension to HIV/AIDS in these regions.

Another issue that has taken centre stage in the fight against HIV/AIDS in these small countries is the issue of intellectual property rights (TRIPS) and its association with the cost and availability of generic and antiretroviral drugs (ARVs). AVERT (2009) notes that, although there is still much work to be done in this area, there has been a significant drop in the price of certain drugs that treat HIV/AIDS in developing countries through activist campaigns, the emergence of competition from generic manufacturers and direct negotiations with pharmaceutical companies. The sheer scale of the devastating impact of HIV/AIDS in small states presents a strong case for governments, the private sector and the international community as a whole to devise ways and means of making both ARVs and generic drugs available to the general public at affordable prices.

In this book, we explore specific features of the three regions that contribute towards the spread of HIV/AIDS and identify the responses by various local and external stakeholders, taking into

account specific country scenarios. Specifically, the intention is to highlight the main economic issues associated with HIV/AIDS in small states, including specific determinants of transmission in particular regions. Furthermore, we examine the best practices in the region for coping with HIV/AIDS, including economic policies and government responses. Some attention will also be given to policies to prevent and treat HIV/AIDS, and to the cost effectiveness of these policies. Finally, we examine the financial support provided both via government budgets and by external funding made available to the small states under consideration.

In chapter 2, Happy Siphambe provides an in-depth discussion of the issues in the Southern Africa region and explicitly identifies key strategies to combat the spread of HIV/AIDS, including institutional responses, financial responses, and education and prevention methods. Using the Botswana data, Siphambe's paper shows the impact on macroeconomic variables such as growth, investment and poverty. The model results show that all economic variables are negatively impacted by HIV/AIDS to a significant degree. Botswana offers a good example of best practice, as exemplified by its commitment in terms of resources and leadership. The challenge for the region is still dealing with issues like stigma and behaviour change. There is also immense concern regarding how to obtain the financial and human resources to cope with the disease and its effects. There clearly remains a need for donor funding, even for relatively better-off countries like Botswana and Namibia. Without donor assistance, HIV/AIDS will remain a major development issue for these small African countries since they run the risk of losing large sections of their populations. This loss is of course compounded by the fact that it usually includes a loss of skilled labour. These countries will also find it to be an immense challenge to meet the Millennium Development Goals (MDGs) if they are not beneficiaries of external assistance in form of financial and human resources.

In chapter 3, Mahendra Reddy explains the intricacies of the Pacific region and demonstrates the region-specific features which, if not dealt with at the micro level, will neutralise national and international efforts. Dr Reddy identifies the salient features of Pacific society, factors that exacerbate HIV/AIDS transmission, as well as factors that make national efforts to contain the spread ineffective. He notes that a major cultural factor that inhibits HIV carriers from talking freely about their infection is that their families and social contacts tend to react with hostility and blame the people who have AIDS for exposing them to the disease. Thus, PLWHA fear ostracism by families and friends. There is also the issue of cultural barriers surrounding discussion about sexual behaviour. Pacific traditions and culture do not allow such discussions between specific kinship relations, and this is also supported by religious teachings. The fact that Pacific societies are small and connected means that maintaining the confidentiality of any discussion whatsoever becomes even more difficult. This social reaction gives rise to the familiar problem of unwillingness to seek formal medical treatment, thereby increasing the likelihood of many cases of infection remaining undetected for extended periods.

There are also many channels for the spread of HIV in the Pacific region. The three most common are the tourism industry, the seafarer community and police and military personnel serving in the Middle East. The reality is that all these channels are important sources of foreign exchange for the Pacific region, and it is possible that this might be the reason why little attention has been given to the HIV/AIDS dimension of these activities.

The region has experienced an increased interest from donor agencies to examine the various dimensions of HIV/AIDS infection, but there are two key problems in this respect. First, the various donor agencies have failed to co-ordinate efforts among themselves, leading to wastage of a significant proportion of donor resources. Second, it has become evident that only a small proportion of the total funds are being spent at the ground level to prevent any further spread of the virus. More strategies and resources in the future must be geared towards activities at the field level.

In chapter 4, Karl Theodore examines the peculiar features of the Caribbean region and how the tourism industry and migration make for an epidemic exposure similar to the Pacific region. The threat to the region's development agenda is fully explored in this chapter.

Chapter 5 attempts to distil the specific issues and challenges faced by the different regions. The point is made that a useful stance for these regions would be to see the epidemic as an opportunity to do things better than before. Ways have to be found to make better use of the resources made available, and explicit strategies are suggested for more effective control of HIV/AIDS.

The aim of the text is to provide an up-to-date and comprehensive analysis of the HIV/AIDS situation in these regions in a manner that will be of value to policy-makers in the three regions.

Note

1. See, for example, Kisanga and Briguglio, 2004.

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