

Volume 5: Walvis Bay

Impact Assessment of HIV/AIDS on the Municipalities of Ongwediva, Oshakati, Swakopmund, Walvis Bay and Windhoek

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for

**the municipal authorities of
Ongwediva, Oshakati, Swakopmund, Walvis Bay and Windhoek,
on behalf Family Health International (FHI) and USAID/Namibia**

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Acronyms

AIDS	Acquired Immune Deficiency Syndrom
ALAN	Association of Local Authorities in Namibia
ASO	AIDS Support Organisation
ARV	Anti Retroviral
EAP	Employee Assistance Programme
EPZ	Export Processing Zone
FGD	Focus Group Discussion
FHI	Family Health International
GDP	Gross Domestic Product
GRN	Government of the Republic of Namibia
HEARD	Health Economics and HIV/AIDS Research Division
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
KAP	Knowledge Attitudes and Practices
KII	Key Informant Interview
MOHSS	Ministry of Health and Social Services
MRLGH	Ministry of Regional and Local Government and Housing
NALAO	Namibia Association of Local Authorities Officers
NISER	Namibia Institute for Social and Economic Research
NEPRU	National Economic Policy Research Unit
NGO	Non Governmental Organisation
PLWA	People Living with AIDS
SADC	Southern Africa Development Community
SIAPAC	Social Impact and Policy Assessment Corporation
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
SWAG	Story with a Gap
USAID	United States Agency for International Development

Executive Summary

Introduction

Namibia has one of the highest rates of HIV infection in the world, and the epidemic is affecting every aspect of Namibian society. The impacts of the epidemic include a reduction in the population growth rate, alterations to the demographic structure of the population, economic losses through a reduction in Gross Domestic Product (GDP), as well as changes in society at large.

Namibia has based its response on the need to involve all sectors, and it is local authorities, as the level of government closest to the people, that play a key role.

However, the ability of municipalities to respond to the epidemic is undermined because it takes place within the context of the epidemic's direct impacts *on local authorities as well*. Municipalities and councils will lose personnel to the epidemic, due to illness, death, or responding to the illness and deaths of family members. Further, HIV/AIDS increases the costs of doing business, effectively undermines efficiency and reduces turnover, with negative impacts on employment potential and the creation of revenue.

Specifically, this investigation considered the impacts on the five Namibian cities of Oshakati, Ongwediva, Swakopmund, Walvis Bay, and Windhoek. This volume presents the findings for Walvis Bay.

As part of their key role in responding to the epidemic, five Namibian municipalities requested support to commission assessments to determine impacts and plan their responses to the challenge. This initiative signalled one of the world's first local authority impact assessments, and the municipalities deserve credit for their foresight. Specifically, this investigation considered the impacts on the five Namibian cities of Ongwediva, Oshakati, Swakopmund, Walvis Bay, and Windhoek. This volume presents the findings for the city of Ongwediva.

HIV/AIDS

Antenatal sero-surveillance surveys are routinely used to measure adult HIV prevalence and are undertaken in Namibia by the Ministry of Health and Social Services (MOHSS). All prevalence data in this report is based on these surveys. The last such survey completed by MOHSS was in 2000, when the antenatal prevalence rate for Walvis Bay was 28%. This is the third highest prevalence rate in Namibia after Katima Mulilo and Windhoek and results from high levels of in-migration in the city, seasonal work opportunities and the fact that it is a port, situated at the end of two long transport corridors.

HIV prevalence in Walvis Bay does appear to be close to its peak. If the epidemic continues to follow past trends, HIV prevalence will peak at 32% by 2004/5. The implication of this HIV prevalence rate is that over one quarter of the adult population in Walvis Bay (those aged 15 to 49+ years of age) are now likely to be infected.¹

The data presented in this Assessment are based on projections derived from models of the demographic impact of HIV/AIDS on the general population. The assumptions used to develop the models are fully discussed in Volume 7. It is important to note that the assumptions used are based on official Ministry of Health and Social Services and Central Bureau of Statistics data, and were discussed and agreed at progress meetings held with municipal officials prior to their incorporation in the model.

The projections indicate that some 9,000 people are presently estimated to be HIV-positive, or an estimated 21% of the town's present population. This will rise to 12,000 individuals by 2012 and slightly under 16,000 in 2021.

¹ Antenatal surveillance is routinely used to measure adult HIV prevalence. This fact is often hotly debated. However, studies elsewhere in the region indicate that, particularly earlier in the epidemic, antenatal prevalence does roughly equate with adult prevalence in the general population. As the epidemic matures, however, it may become an *underestimate* of adult prevalence, as HIV reduces fertility.

The data further suggest that close to 3,000 people in Walvis Bay have died as a result of AIDS. By 2010 the figure is likely to be closer to 10,000 individuals. The 7,000 AIDS deaths expected between now and 2010 are largely unavoidable, because these will result from existing HIV infections. However, it is extremely important to note that many of the projected deaths from 2010 onward could be avoided *if* future HIV infections can be reduced. By 2021, cumulative AIDS deaths are expected to exceed 22,000, *but many of these can be avoided.*

AIDS deaths can be reduced by implementing prevention programmes, including those that encourage destigmatisation, wellness and positive living for those infected, and, should this become more widely available in Namibia, through treatment.

Population Growth

Despite the HIV/AIDS epidemic, the projections indicate that Walvis Bay will continue to grow, but at a slower rate, mainly because of continued high inward migration from other areas.

The population of the town is presently estimated to be some 45,000 individuals (2002), but this number would have been far higher in the absence of AIDS. By 2021, in the absence of AIDS the population of Walvis Bay would be over 109,000 people. However, the epidemic is expected to result in a population of some 72,000.00 people by 2021, over 34% lower than it would have been without AIDS. This reduction in the town's size will have implications for the town's planning, service delivery and revenue growth.

The socio-economic impacts of HIV/AIDS on Walvis Bay are therefore likely to be severe. This is because of the number of deaths and because those who are dying are in the productive or working age groups, and because these are the workers and parents serving the community.

Economic Impact

The economy of Walvis Bay is based primarily on fishing and its harbour, with a small but growing retail sector and tourism industry. Many migrants are attracted to the city in search of work within the fishing industry but there is a large seasonal variation in the level of available employment. These factors make employees susceptible to HIV infections as migrant labour, in particular, has long been associated with high-risk sexual behaviours. HIV infections will increase the cost of labour to the industry through the increased of absenteeism, sick leave, productivity and experience losses.

The city has a high unemployment rate (estimated at over 20%). While sick and dying employees can be replaced easily, particularly in the processing operations which rely largely on unskilled labour, the loss of skilled and experienced labour within the industry will become increasingly difficult to replace. However, the success of the fishing industry is determined by many other factors and while HIV/AIDS will affect the industry, and increase its costs, its success from year to year will largely be influenced by other factors.

The harbour in Walvis Bay is Namibia's major port. The HIV/AIDS epidemic will again increase the cost of labour in this sector, but this is unlikely to be the greatest impact on the harbour as a result of the epidemic. The level of imports through the port, such as petroleum, is largely determined by the performance of the national economy. The growth of the national economy will be slowed as a result of increased AIDS deaths. The rate at which imports increase will, therefore, also be slowed, reducing the port's growth.

Walvis Bay operates an Export Processing Zone, offering various incentives to potential investors, provided they produce solely for export. The HIV/AIDS epidemic has important implications for the zone as it competes internationally for investment. As HIV/AIDS increases the cost of labour it will reduce the Zone's competitiveness.

Economic impacts will be felt not only at industry level, but also by households and retail businesses. Individuals face reduced productive capacity, often resulting in lowered income, as they become unable to work. At the same time as access to money becomes more difficult, the need to spend on medical and other services increases.

The effects of illness and death resulting from AIDS are also felt both by individuals and the households in which they live. Infected individuals experience lowered income as they become unable to work. The situation is similar at the household level, as individual illness often results in a reduction in household income or production. The impact is then further exacerbated as productive activities and labour resources across the household are diverted towards the care of ill household members resulting in changes in the level and composition of the goods and services they demand. Retailers and producers will, therefore, be affected in different ways and as businesses are impacted, productivity declines and further jobs are lost. The economic impacts of HIV will, therefore, be felt not only by those infected but also by the entire community.

Orphans

HIV/AIDS profoundly affects families and communities, not only resulting in the loss of labour and assets, but also affects socio-cultural skills while placing almost unprecedented stress on community and extended family networks. One of the most serious consequences of the epidemic is the increase in the number of orphans. It is estimated that there are over 1,500 children in Walvis Bay who are currently under the age of fifteen and have lost one or both of their parents as a result of AIDS. This number is expected to increase to over 5,000 in the next 10 years. It is important to note that these figures may be an *over-estimate* of the scope of the orphan situation in Walvis Bay. A study of orphans (SIAPAC, 2002) indicated that many children who are orphaned in the southern and central regions of Namibia are sent to their extended families in the north on the death of their parent(s).

Impacts on the Municipality of Walvis Bay

These impacts will result in demands from the community for expanded or new services to be provided by local authorities and a lowered ability to pay for these services. However, municipalities are not isolated institutions and will not be immune from the impacts of the epidemic. These impacts result from the sickness and death of municipal personnel infected with HIV, and can include:

- loss of productivity;
- increased absenteeism;
- cost of sick and compassionate leave;
- increased cost of benefits; and
- increased recruitment and training costs to replace lost staff members.

The challenge is that the epidemic erodes the ability of institutions, including local authorities, to provide services, as it reduces *both* efficiency and revenues, while the personnel losses induced by HIV/AIDS affect the quality of services the municipality is able to provide.

It is important to understand that HIV-infection precedes AIDS illness and death by some eight to ten years. In other words, the AIDS mortality presently being experienced within Walvis Bay Municipality results from HIV-infections acquired some six to eight years ago. The full impact of AIDS on the municipality is therefore only likely to be felt between 2008 and 2010 when the numbers of those falling ill and dying will reflect the town's current high prevalence rate. The period 2001- 2012 was therefore selected for projecting the impact of HIV/AIDS on these employees because, while current infections cannot be prevented, it was assumed that *immediate* prevention activities would be put in place to reduce those in future.

In 2001, Walvis Bay employed some 522 individuals. Over the period, 2001- 2012 the municipality is projected to lose some 190 staff across all grades to AIDS, provided staff numbers remain the same. AIDS deaths among staff are projected to continue to peak between 2005 to 2010 during which period some 80 deaths are projected. Staff in the Patterson Grading System A bands (the lowest level) comprises some 57% of all municipal

workers. Over the next ten years, annual AIDS mortality among these personnel will amount to some 150 deaths, increasing from eight in 2001/2 to fourteen deaths by 2008, levelling at an estimated ten deaths each year thereafter. Over the 2001 - 2012 period, some forty employees are projected to die of AIDS across all other Bands (B through F).

These levels of AIDS mortality will impact on the municipality through increased absenteeism (sick and compassionate leave), productivity losses and increased replacement and training. Each of these impacts will have an associated cost and will therefore require management and mitigation, with particular attention being paid to the financial and human resource management implications.

Human Resources Management Information System

Walvis Bay maintains human resource records and data, and was able to provide the consulting team with the personnel data needed to complete this Impact Assessment. However, at the outset it is important to note that refinement is needed to improve the type of data that should be provided to managers on a monthly basis enabling them to monitor and manage the impact of the epidemic internally. Leave data should be collated monthly, by type and length of leave taken by grade of staff (i.e., whether sick, vacation, compassionate, or bonus leave, etc.). The costs of this leave (by type and grade) also need to be calculated monthly.

Leave

The amount of sick leave taken by staff because of AIDS-related illness is one of the main costs of the epidemic to any employer. Walvis Bay municipality employees are entitled to 120 days sick leave at full pay over any thirty-six month period, which can be extended by 120 days of sick leave at half pay over a thirty six month period.

During 1999 and 2000, the number of staff sick leave absences increased from 2,400 in 1999 to 3,100 the following year, without any substantial increase in staff numbers. The epidemic will increase the amount of sick leave taken by Council workers. Analysis indicates that the number of days off taken by municipal employees *as a result of AIDS* will increase from about 750 days in 2002 to 1,100 days by 2009, thereafter decreasing to around 900 days per year. Obviously, the costs of this will be high and programmes that encourage positive living and wellness could assist in reducing these.

Benefits

Among the benefit entitlements of employees of Walvis Municipality are medical aid and pension contributions. In both cases monthly contributions by the municipality can be expected regularly to increase because of the epidemic.

Membership of a medical aid plan is voluntary for employees of the municipality. Where employees are members, the municipality pays 50% of the employee's monthly contribution. The cost of medical aid to Council and to its employees is rising as the number of those requiring medication due to AIDS-related illnesses increases.

Similarly, most employees of Walvis Bay Municipality are members of the Retirement Fund for Local Authorities in Namibia.² This Fund operated as a defined benefit fund until 1992, when due to the large number of claims it changed to a defined contribution fund. This means that the amount paid to members' families on their premature death was reduced. The current death benefit allows for a lump sum payment of 5.3 times annual salary at the death of a member, with three differing options based on the level of guarantee and investment. The impact of HIV/AIDS has already caused the funds to lower the death benefits and to increase the cost to the members. This trend will continue as more members die from the diseases associated with AIDS and death benefit claims continue to rise.

² Other employees, a small minority, are members of the Walvis Bay Local Authority Retirement Fund, on which no data was made available.

Training

The municipality provides training to staff subject to its policies. HIV/AIDS will increase the need for training of personnel, as employees are lost to the epidemic early in their careers. Equally, the private and other sectors, which may offer higher salary and benefit packages, may increase the rate at which they 'poach' trained staff as they lose employees. This, in its turn, will increase the costs of training as it further increases staff turnover. Training policies therefore need to include strategies for maintaining and developing skilled staff. These have to be based on the provision of more frequent but shorter-term training opportunities, within affordable cost parameters.

Critical Functions

Some of the institutional costs associated with HIV/AIDS can be identified and, with some difficulty, quantified. Many, however, are more difficult to determine and these less obvious costs and consequences may be larger and more important. These include the loss of institutional memory, the impact on staff morale, and the inability to perform critical functions.

Costs

For Walvis Bay, the main costs will lie in increased absenteeism, medical aid contributions and productivity losses. Over the nine year period (2002 - 2010) the present value cost will be N\$4,479,675 across all bands. The following table provides data on these increased costs by band. The figures are discounted totals (i.e., are shown at present value):

Table ES1.0: Total Increased Costs Resulting from the Epidemic by Band, Municipality of Walvis Bay (2002 - 2010)

Band	2002	2003	2004	2005	2006	2007	2008	2009	2010
A1	137,295	155,826	166,397	173,164	176,799	176,632	176,408	174,881	168,044
A2-3	59,992	63,021	68,738	71,002	67,609	64,339	61,210	58,232	51,373
B	75,277	87,523	93,217	88,874	84,620	80,493	76,536	65,539	51,352
C - F	115,174	128,083	147,086	157,890	150,332	143,006	135,981	116,108	90,406
All Bands	387,738	427,033	459,968	467,352	448,014	426,233	405,365	364,164	306,869

However, the internal costs arising from the impact of HIV/ AIDS on municipal personnel are not the sole economic impact of the epidemic. The performance of the economy and the growth rate of the town may affect the level of demand for municipal services. There must also be concern as to the ability to pay for most services as a result of constrained household economies resulting from HIV/ AIDS. Electricity provision is, however, different. It is likely that overall electricity sales will be related to the performance of the town and regional economy. Any factor, such as AIDS, depressing the growth of the economy will depress the growth in demand for electricity and revenue generated from this source.

Further, while household ability to pay for services will be constrained, their willingness to pay for these is unknown. This can only be assessed through household level quantitative surveys, which are beyond the scope of this Impact Assessment. However, it may be that those suffering AIDS-related economic shocks would be willing to pay for services, sacrificing other items in their household budget.

The sale of land and houses is another important source of revenue for the municipality. HIV/AIDS will affect these sales in a number of ways, complicating the achievement of delivery targets and interfering with revenue flows. If land or property is purchased from the municipality with no financial ties between the buyer and the municipality existing after the sale, these impacts will be minimal. The exception being that house and land prices and the health of the market will be affected by HIV/AIDS via the epidemic's impacts on the local and regional economy. These are likely to result in reduced sales.

The municipality presently sells serviced erven to those who can afford market prices and to low income groups through development projects where the costs of prefinancing service provision is recouped. Sales through these projects are insured against the death of the land or house owner, who, in addition, is required to name a beneficiary in the event of their death.

However, administrative costs will increase as the number of AIDS deaths rise, as changes in the financial and legal arrangements will have to be processed or repossession conducted. Even in cases where outstanding debt is covered by an insurance policy, death decreases the profitability of sales. This is because property sales generate revenue in two ways, firstly through the capital payment and secondly through the interest received. Insurance protects the capital, but early payment following a death means the loss of interest income for the remaining years of the loan.

A related and important issue is the impact of HIV/AIDS on revenue growth. All major sources of revenue are related to the size of the town, in terms of area and population. This reduction in the size of the population has implications for planning of service delivery over the next ten to twenty years. This is particularly important in towns, where investments, such as electricity substations are a significant cost item.

Equally, the demand for burial space and cost associated with its allocation, preparation and maintenance will increase as the death rate climbs and will need to be planned for. How great such an increase will be is difficult to estimate. Many residents of Walvis Bay are migrants from elsewhere in Namibia. They may well opt to return home while ill and die outside of the town.

In addition, the epidemic demands that the Council take the lead in preventing further HIV infections not only among its staff, but also in the community it serves. These new services will require not only additional staff, but also new programmes and materials whose introduction obviously has cost implications.

Chapter 1: Introduction and Background

Introduction

The HIV epidemic is affecting every aspect of Namibian society. These impacts include, among others, a reduction in the population growth rate, alterations to the demographic structure of the population, economic losses through a reduction in Gross Domestic Product (GDP), as well as change in society at large. The response to these wide ranging implications needs to involve all concerned. Paralleling these national impacts are severe impacts on households and extended families. Food security is being undermined, breadwinners are dying, and household coping strategies are under unprecedented strain.

To respond to this national challenge, Namibia created the National AIDS Control Programme in 1990, which was eventually relaunched as the National AIDS Co-ordination Programme (NACOP) in 1999, underlining the need for a multi-sectoral response to the epidemic. Namibia is currently implementing the second HIV/AIDS plan (1999-2004), which outlines the responsibilities of the various sectors.

Coinciding with the launching of NACOP in 1999, a National AIDS Committee was also formed. It is chaired by the Minister of Health and Social Services, and co-chaired by the Minister of Regional and Local Government and Housing. The co-chairpersonship by the Minister of Regional and Local Government and Housing is in recognition of Government's commitment to decentralisation, but is also in recognition of the fact that regional and local authorities are the ones who are closest to the people they are meant to serve.

While the need to respond to the epidemic places considerable burdens on regional and local authorities in terms of implementing effective responses to the epidemic, their ability to do so is undermined because it is taking place within the context of direct impacts *on the local authorities as well*. The local authorities will lose personnel to the epidemic, due to illness,

death, or responding to the illness and deaths of family members. Further, HIV/AIDS will increase the costs of doing business, and will effectively undermine the efficiency of the sector and reduce turnover, with negative impacts on employment potential and the creation of tax revenues. Local authorities are therefore playing a central role in preventing and coping with the epidemic, while they themselves are directly affected in a variety of ways.

This volume deals specifically with the results of the assessment as they pertain to the municipality of Walvis Bay. Data from the Ministry of Health and Social Services (MOHSS) surveillance survey conducted in 2000 indicates that antenatal HIV/AIDS prevalence rates for those aged 15-49 in Walvis Bay was 28%. In effect, over one-quarter of the working age adult population of the municipality may be HIV positive, and will eventually die of AIDS, resulting in productivity, skill and economic losses. These high levels of infection clearly highlight the need to better understand the implications for the town and its council.

Background to the Study

In recognition of the key role being played by local authorities, in 2000 the Chief Executive Officer of the Municipality of Windhoek initiated a process to consider the impacts of the HIV/AIDS epidemic on the municipality of that city, as well as the people it serves. After discussions with counterparts in Walvis Bay and Swakopmund, the proposed investigation was broadened to include the two coastal towns as well, and was later further expanded to the two northern towns of Oshakati and Ongwediva.

Financing was sought for the impact assessments from the United States Agency for International Development (USAID), and provided via Family Health International, an international non-governmental organisation working in the HIV/AIDS arena. Technical support for the impact assessment was provided by Social Impact and Policy Analysis Corporation (SIAPAC) and was implemented by SIAPAC in conjunction with the Health Economics and HIV/AIDS Research Division (HEARD) of the University of Natal, Durban, South Africa and JTK Associates, a development consulting company located in Mbabane, Swaziland.

Aims and Objectives

The **aim** of this assessment is to provide detailed insights into the internal and external impacts of the HIV/AIDS epidemic on the five municipalities of Ongwediva, Oshakati, Swakopmund, Walvis Bay and Windhoek, as follows:

Internal Impacts

- the impact of HIV/AIDS on the personnel within the Municipality;
- on the ability of the municipality to meet its mandated responsibilities;

External Impacts

- on the businesses within the city;
- on the health services;
- on the economic and social well-being of households covered by the Municipality;
- on the overall quality of urban life in the city.

Of equal importance, the assessment will help to 'mainstream' HIV/AIDS into the functions of the municipalities. This is accomplished through the development of an HIV/AIDS strategy and action plan following review of this report by the respective local authorities.

Specific **objectives** of the assessment are as follows:

1. Project the demographic impact of HIV/AIDS illness and death on the population of local authority personnel, and indicate needed additional human resources.
2. Project the demographic impact of HIV/AIDS illness and death on the population living in the local authority areas.
3. Project the economic impacts of HIV/AIDS on households in the local authorities' areas and consider the impact this will have on affordability and payment for local authority services and the overall revenue base.
4. Project the economic impacts of HIV/AIDS on businesses in the local authorities' areas and consider the impact this will have on the viability of key business sectors.
5. Qualitatively assess the impact on 'quality of life' for the local authority areas (e.g., ability of households to meet basic livelihood needs, levels of crime, street children, etc.).

6. Consider the costs associated with HIV/AIDS prevention activities for local authority personnel. Compare this to the costs associated with *not* implementing the intervention. Outline possible medical care programmatic interventions.
7. Outline an HIV/AIDS strategy and action plan.

Methodology

The study was divided into four phases: design; implementation; analysis and write-up; and planning/integration.

Design

Mobilisation

Start-up was delayed for several months due to various technical requirements, and work on the Assessment only began in September 2001 when all outstanding agreements were in place. Work began with a series of inception visits by the Deputy Team Leader, Mr. Mouton of SIAPAC, to all participating local authorities. The purpose of these visits was to brief local authority executives on the assessment and begin preparations for the Inception Workshop.

Inception

The Inception Workshop was held at the Safari Hotel in Windhoek on 7 and 8 November 2001. It was attended by participants from each of the participating local authorities, among them Chief Executive Officers and finance and human resource managers. The purposes of the workshop were to:

- introduce participants to the aims and objectives of the project assessing the impact of HIV/AIDS on five Namibian cities (Walvis Bay, Windhoek, Swakopmund, Oshakati and Ongwediva);
- to seek agreement on project aims and objectives with participants, following review and discussion; and
- to plan and agree to a schedule of work with representatives of each local authorities.

These objectives were met. In addition, participants recommended that an Advisory Group be appointed to guide the work of the consultants and local authorities during the

Assessment, and suggested the membership of the Advisory Group. Participants also agreed on the nature and type of information and data needed for the Assessment that were to be supplied by the municipalities, and established a schedule for its provision. The Workshop minutes are included in Volume 7 of this report.

Following this workshop an Inception Report was submitted. This contained changes to the propose schedule of work because of the late start of the Assessment, and the difficulties imposed by the pending Christmas break when few officers would be available to collect the requisite information.

Concurrent with data gathering activities was the completion of a detailed literature review. A bibliography is attached to this volume.

Following the literature review, and in addition to long-term dialogue and information gathering activities, qualitative data gathering instruments were developed to conduct interviews with municipal employees. Specifically, *qualitative* discussions were held with small groups of municipal officers. The aim was to gain insights into attitudes about HIV/AIDS and recommendations on how HIV/AIDS prevention activities should proceed within the local authorities. Two qualitative approaches were employed: 1) focus group discussions; and 2) story with a gap. These were supplemented with key informant interviews with municipal managers.

At the end of this Design Phase progress meeting were held (one in Windhoek, one in Walvis Bay, one in Swakopmund, one in Oshakati and one in Ongwediva), at which time Progress Report 1 was submitted.

Implementation

Implementation consisted of three activities:

- 1) reviewing then information made available and analysing the gaps in the data;
- 2) projecting HIV/AIDS impacts; and
- 3) implementing key informant interviews, focus group discussions, and story with a gap group discussion instruments.

As soon as the relevant data became available from the local authorities on municipal personnel, these were applied to projections of municipal personnel numbers. The 1998 projections of the demographic impact of HIV/AIDS were updated by MOHSS to include 2000 seroprevalence data (using the SPECTRUM group of models), and these were used as the basis for projecting the impact of the epidemic on the five local authorities and the populations they serve.

The model required a great deal of demographic data in order to complete the projections. Data from the Central Bureau of Statistics (CBS) and the Ministry of Health and Social Services (MOHSS) were used, and the assumptions made were, to the extent possible, the same as those used in the national projections on the demographic impact of HIV/AIDS. A more detailed discussion in this regard is included in Volume 7.

The data on local authority personnel and local populations were needed in a format that was both consistent and useable. These requirements were communicated to the local authorities, and during the initial start-up meetings the consultants provided the local authorities with a format for these data and agreed to a schedule for their provision. Most of the municipalities were able to comply but, despite everyone's best efforts, a number of delays were experienced in receiving these data.

Once the data became available, projections from the model were applied to the relevant local authority populations. For example, the model allowed the projection of HIV prevalence levels and AIDS-related deaths among municipal staff by cadre. Similarly, it allowed the investigation of the demographic impact of the epidemic among the populations these authorities served, and allowed consideration of some assumptions about these effects on demands for services and abilities to pay for these.

To supplement the quantitative data and collect information on attitudes important for an understanding of the potential impact of HIV/AIDS on the five municipalities and the people they served, two qualitative approaches were used: 1) Focus Group Discussions (FGD); and 2) Story With A Gap (SWAG). FGDs are particularly useful in collecting detailed insights into sensitive issues such as HIV/AIDS. SWAG is a variation on the FGD approach, and is a useful tool in getting participants to consider their current situation in relation to a desired state, and discussing roadblocks and needed actions to move from their current state to a desired one. For this consultancy, the two approaches were used so that respondents could consider how the local authorities might best respond to the epidemic.

At the end of the Implementation Phase further progress meetings were held (meetings were held in each of the five municipalities), at which time Progress Report 2 was submitted.

Analysis and Write-Up

As data become available the impacts of HIV/AIDS on the local authorities were modelled. This took some time, given the complexity of the projections, particularly in relation to internal migration within Namibia, and given continued data gaps. The model does not easily accommodate internal migration effects, and assistance was sought from the developer of the model in this regard. In response to requests from the Consultant, Mr. John Stover of The Futures Group kindly developed the bridging formulae needed to allow the model to incorporate internal migration.

Qualitative/participatory findings were compiled using NUD*IST, a data analysis software package designed to systematically interrogate qualitative findings, and thereafter the key findings were incorporated into the reports.

The report was then submitted for review by the municipalities and comments solicited. A final series of progress meetings was held with each of the five municipalities in order to present the findings from the draft report and facilitate receipt of comments and feedback.

Planning and Integration

Methodologies to integrate HIV/AIDS into the activities of the three local authorities, and to assist the five municipalities in prepare concise HIV/AIDS Prevention and Response Strategy and Action Plans, were developed at an advocacy workshop with the five local authorities. This was held in Walvis Bay from August 12 - 16, 2002. This planning workshop assisted the five local authorities to review and analyse the findings from the reports. Following this, participants began the process of planning for interventions intended to mitigate the impacts on the municipalities themselves, including prevention programmes intended to reduce infection rates among municipal personnel and the communities they serve.

Following the workshop the reports were finalised in draft form for final circulation, incorporating comments and changes from the local authorities. These now constitute the draft reports, and include the action plan and advocacy strategies developed at the closing workshop.

Data Limitations

Throughout the Assessment participating local authorities were extremely co-operative and helpful in making requested data available to the consulting team. However, in several instances the data required to fully assess the impact of HIV and AIDS on a particular municipality was simply not available. Where this has occurred, the impact has been assessed qualitatively. For example, in Windhoek it has not been possible to obtain detailed data on the economic base of the city by sector (i.e., manufacturing, retail, tourism, etc.). Assumptions have had to be made about their relative importance, and this has made it difficult to more precisely determine the contribution made by these industries to the municipality's revenue base and the potential impact of HIV on this.

While the data gaps vary across the five municipalities, one purpose of the strategic and action planning workshop is to assist the municipalities begin to fill these gaps and each has now included data gathering and analysis in its draft action plan.

Structure of the Overall Report

This final report is presented in seven volumes. The first volume presents integrated findings across all five cities, including a more detailed discussion of the methodology used as well as background on Namibia, the HIV/AIDS epidemic and local government in the country, while the five subsequent volumes present specific findings for each of the participating local authorities. The volumes are as follows:

This report consists of seven volumes. This Volume presents findings for the Municipality of the Town of Walvis Bay.

Volume 1	Detailed study description, methodology, background information on Namibia, the epidemic in the country and on local government, as well as integrated findings arising from the Assessment of the Impact of HIV/AIDS on Five Namibia Cities
Volume 2	Assessment of the Impact of HIV/AIDS on the Town of Ongwediva
Volume 3	Assessment of the Impact of HIV/AIDS on the Town of Oshakati
Volume 4	Assessment of the Impact of HIV/AIDS on the Town of Swakopmund
Volume 5	Assessment of the Impact of HIV/AIDS on the City of Walvis Bay
Volume 6	Assessment of the Impact of HIV/AIDS on the City of Windhoek
Volume 7:	Appendices Terms of Reference Projections and Modelling Field Instruments Minutes of Advisory Committee Meetings Inception Workshop Prevention and Response Strategy and Action Planning Workshop Bibliography

The intention is that each volume of this Assessment can be read as a stand-alone report. In order to present readable and comprehensive reports for each participating local authority, there is, however, some duplication between these volumes, in that a brief discussion of background information, the structure of the report, and an overview of the methodology used are included in volumes 2-6. However, a detailed discussion of methodology, particularly that related to the models used to present demographic projections of the impact of HIV/AIDS on each city, as well as the planning and strategy development matrices used, will be found in Volume 1 of this study.

Structure of this Volume

This volume presenting findings for the town of Walvis Bay is structured as follows:

Chapter 1	Introduction, Structure of the Report, Methodology and Background to the Study
Chapter 2	Walvis Bay, its community and municipal structure and functions
Chapter 3	The Impact of HIV/AIDS on the town of Walvis Bay, its population and economy
Chapter 4	The Impact of HIV on the Walvis Bay Town Council
Chapter 5	The Way Forward

Chapter 2: Walvis Bay

Introduction

Re-incorporated into Namibia in 1994, three years after Independence, Walvis Bay became Namibia's second city and lies in Erongo Region. It has Namibia's only deep water port (and is thus the main entry point for maritime import and export commodities) and is one of the country's main industrial centres.

This chapter provides information on Walvis Bay, its population and economy, and its municipal structure and functions.

Demographic Profile

During the previous dispensation, accurate population data for Walvis Bay were not recorded. The town was not included in the 1991 Namibia census and as a result reliable population data are not available prior to the release of the preliminary findings from the 2001 Census.

However, survey data does appear to indicate that Walvis Bay's re-incorporation into Namibia in 1994 resulted in an immediate increase in internal migration, driven by the perception of job and other economic opportunities in the town's primary industry, fishing, as well access to urban social services. By 1997, planners estimated Walvis Bay's growth rate as 6.56% which, at the time, was higher than that of the capital, Windhoek. Most (6.5%) of this growth was attributed to in-migration of job seekers.

Since that time, and following a decline in the fishing industry, these high levels of in-migration may have slowed. Initial (1997) estimates indicate that the city's population was projected to reach over 55,000 individuals by 2004, from a base population of an estimated 38,000 residents in 1997. However, preliminary data from the 2001 Census reveal that the municipality had a population of 40,849 individuals, living in 10,719 households. Walvis Bay

thus becomes Namibia's third largest city in terms of the size of its population (after Windhoek and Oshakati, respectively). However, it must be noted that planners within Walvis Bay Municipality challenge these preliminary data from the 2001 Census, stating that these appear to have under-counted backyard squatters in areas such as Kuisebmond. The municipality's own survey (which was not a census) indicate that the population of the town lies between 48,000 and 52,000 individuals. Data in this section of this report are, however, based on national Central Bureau of Statistics findings, as these are the official data.

As a result of in-migration, the population of Walvis Bay is diverse. However, the distribution of this population within the municipal area, while slowly changing and integrating, continues to reflect historical patterns of segregation.

The city is zoned into four areas (see map) having the following demographic and socio-economic characteristics:

Walvis Bay North: This area includes the former township of Kuisebmond and contains some 66% of Walvis Bay's population (Billawer and Ekobo, 2002). Kuisebmond is the area in which most new migrants to Walvis Bay settle, and in 1997 some 63% of its residents were seasonal migrant workers. The densification of 'backyard squatting' on erven (estimated at 13% in 1997 and now visibly higher) is further evidence of the presence of migrant workers in Kuisebmond.

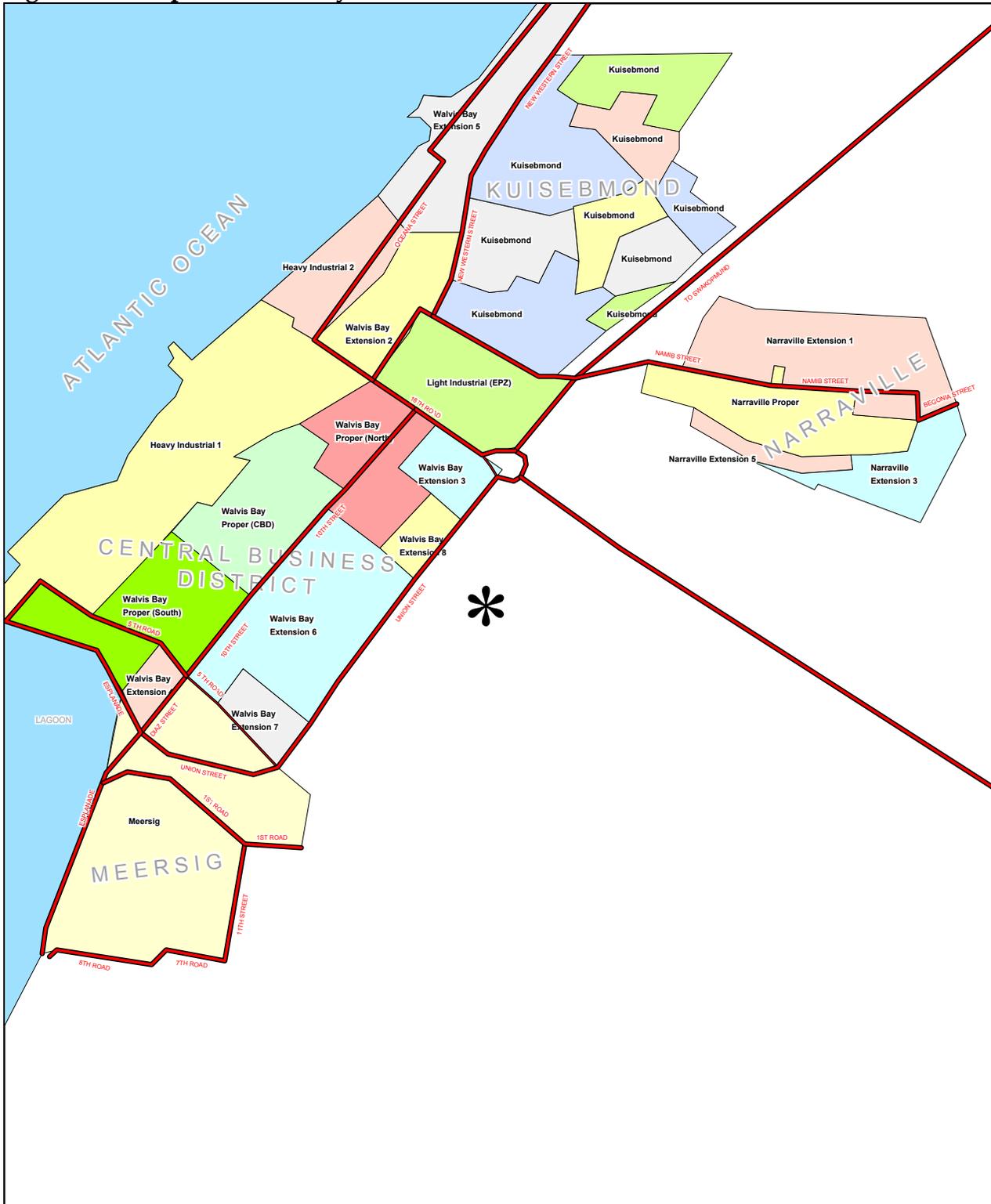
Many Kuisebmond residents are employed in the fishing industry (over 30%) and most are unskilled workers. The area has the highest unemployment rate in Walvis Bay, estimated to be over 20%, with many of these being recent in-migrants.

Walvis Bay East: This includes Narraville, the former 'coloured' township and a light industrial zone. Twenty percent of the population of Walvis Bay lives in this area. Unemployment here was estimated at 8% in 1997.

Walvis Bay South: Walvis Bay South consists of low density residential areas that include Langstrand, Meersig and Extensions 4, 6 7 and 8. This area had the lowest unemployment rate in the city (1%) in 1997 and had the highest household income levels (estimated at in excess of N\$10,000 per month).

Walvis Bay Central: The Central Business District (CBD) is defined as the zones containing heavy industry as well as the southern portion of Walvis Bay proper which includes several low-density residential areas.

Figure 2.1: Map of Walvis Bay



The Economy

The economy of Walvis Bay is based primarily on fishing and its port, with a small but growing retail sector and tourism industry.

The fishing industry in Namibia has been growing in importance in recent years in terms of its contribution to GDP. The industry is viewed as critical to municipal revenue, as 'a healthy fishing industry (directly) increases the income base of Council via higher water and electricity consumption. Indirectly, fishing creates more employment thus the demand for housing increases, with the resultant increase from all other services'. (Walvis Bay Municipality: 2000). The industry represents by far the largest source of employment, with over 12,000 employees involved either directly in fishing or in fish processing. Because of job opportunities in the fishing sector, migrants are attracted to the city in search of work. There is, however, large seasonal variation in the level of this employment, arising from the seasonality of fish stocks and types.

The harbour in Walvis Bay is the major port for Namibia. In terms of imports it mainly handles petroleum products and exports such as salt and fish. The level of imports, and particularly petroleum, are largely determined by the performance of the national economy.

In an effort to diversify and expand its economic base an Export Processing Zone (EPZ) was created in Walvis Bay in 1996. The zone offers incentives to potential investors, provided they produce solely for export. Its purpose was to stimulate economic growth through the promotion of the manufacturing sector, and the intention was to establish four new enterprises annually. In 2001 there were only four companies operating in the EPZ (Human Geography Atlas: 2001). This slow growth appears to be a result of competition from other Export Processing Zones in the Southern Africa Development Community (SADC) region.

There are a number of other small enterprises in Walvis Bay, with the number of registered businesses estimated at approximately 2,000, the majority employing between 1 and 5 individuals. These are primarily involved in the retail sector and employ relatively few people.

Socio Economic Status of Residents

The port and the fishing industry have helped the town become one of the wealthiest urban areas in Namibia. However, the socio-economic status of residents is varied, with high levels of inequality. The employment rate in the city was 63% in 1997, with 75% of all resident males being in employment, but only 44% of females were employed.

While incomes are higher than the national average, the Primary Household Subsistence Level (PHSL) (which refers to the amount of money a household needs to satisfy basic needs for food, clothing, energy, washing and cleaning) was set at N\$1,200 in 1997. At that time, over half (56%) of Walvis Bay's household's earned below this minimum level, primarily those residing in northern and eastern areas of the town. The following table displays household income for the four areas in the city.

Table 2.1: Household Monthly Incomes, Walvis Bay (1997)

Area	Household Monthly Income (N\$) (1997) (mode)
Walvis Bay North	1001 - 1500
Walvis Bay East	1001 - 1500
Walvis Bay Central	n.a.
Walvis Bay South	10,000 +

While average household income for both the north and the east was between N\$1,001 and N\$1,500, it was over N\$10,000 for the southern area of the town. These high levels of income inequality between residents of the different neighbourhoods and the relative poverty of the northern and eastern areas will result in an uneven spread in HIV infection rates in the town.

The Municipality

Walvis Bay is defined as a Part 1 Municipality under the Local Authorities Act (No. 23 of 1992) as amended in 2000 (No. 24 of 2000). This Act made municipalities the top tier of local government (followed by towns and villages) and decentralised many of Government's powers to these local authorities, making them the most autonomous form of local government in Namibia.

The city's revenue is derived from rates and taxes as well as the sale of water, electricity and land. Walvis Bay is one of the wealthier municipalities in the country, and subsidies are only received from central government as development loans and the construction of roads. In part, however, the municipality's positive financial status is due to the fact that its debts were written off by the previous (Cape) administration prior to the town's re-incorporation into Namibia. The municipality's overall (operating) budget for the past three years is presented below.

Table 2.2: Walvis Bay Operating Budget, 2000 - 2002

Item	2000	2001	2002	2003
Total Expenses	122,144,376	133,771,964	150,891,610	152,716,374
Total Revenue	123,559,869	134,439,004	151,275,621	149,613,946
Salaries & Benefits (% of expenses)	34.7	34.5	39.4	38.4

Source: Walvis Bay Operating Budget, 2002.

Together with rates, water, electricity, housing, sewerage and refuse removal are key revenue generating services provided by the municipality. The departments operating these services also employ the most staff. The most significant cost for the municipality is the payment of salaries, which accounts for between 34-40% of expenses. This highlights the importance of the council as both a service provider and an employer in the town.

The function of the municipality is to provide the following quality, effective and efficient services: water, electricity, roads, housing, parks, financial support, engineering, secretariat, emergency services, traffic services, sewerage, gas, refuse removal, environmental health services, community development, social services, generate income, sanitation, recreation and sport facilities, industrial development, economic development, facilitating investments, promotion of tourism.

“The main purpose of providing quality services is to promote the quality of life in Walvis Bay.” Key Informant. Senior Management.

In fulfilling these functions the Municipality is responsible for development, progress and change for the Walvis Bay community. In order to meet these responsibilities the Municipality is structured into six departments working under the Chief Executive Officer, who reports to the elected City Council. In November 2001 the Council employed some 523 people.

These departments have the following functions according to Key Informants interviewed during this Assessment:

Table 2.3: Key Departmental Functions, Walvis Bay Municipality

Department	Functions
Department of Finance	Financial investments, applying relevant financial policies, controlling the use of money, revenue collection.
Department of Corporate Service	Secretariat services, providing legal advice, human resources management, employment creation, capacity building; recruitment and selection of employees, training of staff.
Department of Energy	Distribution and maintenance of electricity networks, and supervision of council’s electricity supply stations.
Department: Roads and Building Control	Building regulations and ensuring road access, control and maintain roads, approve buildings, supervise the construction of buildings, general maintenance work.
Town Planning Services	Town planning.
Department: Community Development	Provide services, such as public housing, erven, parks and gardens, manage council finances, advice council on financial matters in terms of prioritising capital projects.
Department of Water, Waster and Environmental Management	Provide and maintain sewerage systems, provide water, refuse removal, management of solid waste, sanitation, environmental health information, inspection of food qualities at outlets, community health, pollution, control construction of buildings, occupational health and safety.

Core and Peripheral Municipal Functions

While all departments were regarded as important, senior managers interviewed during this Assessment indicated that the Municipality's services could be divided into core and peripheral functions as follows:

Table 2.4: Core and Peripheral Municipal Functions, Walvis Bay Municipality

Core Functions	Peripheral Functions
Water	Tourism
Electricity	Parks
Housing	Tarred Roads
Sewerage & Refuse	Town Halls
Roads	Recreation and Sport
Health	
Safety & Protection	

Implementation of these core functions requires that each of the departments directly responsible is able to operate effectively. These abilities will be impacted by the HIV/AIDS epidemic.

Services

The Municipality is providing services (water electricity, sewage and refuse removal) to some 10,719 households resident on 7,127 erven.

The following table provides data on the number of erven (plots) and households receiving services.

Table: 2.5: Erven and Households Receiving Municipal Services, Walvis Bay

Sections	# Erven	HH/Erff	# HH Services	Population Estimates (2001)
Walvis Bay North	2784	1.5	6176	26551
Walvis Bay East	1881	1.05	1976	8170
Walvis Bay Central	955	1	955	2921
Walvis Bay South	1507	0.7	1055	3165
Totals	7127 *			40849

* Excludes single quarters and hostels (545 flats in 1995).

All erven receive water, electricity, sanitation and refuse removal services. The level of these services differs based on affordability, thus some communities (primarily in Walvis Bay North) receive communal water and sanitation. In these areas progress has been made since 1994 in housing provision, in an attempt to reduce backyard squatting. However, the level of migration to the city, while reduced from previous high levels, implies that the housing and serviced erven backlog in Walvis Bay North will continue for some time to come.

Chapter 3: The Impact of HIV/AIDS on Walvis Bay

Introduction

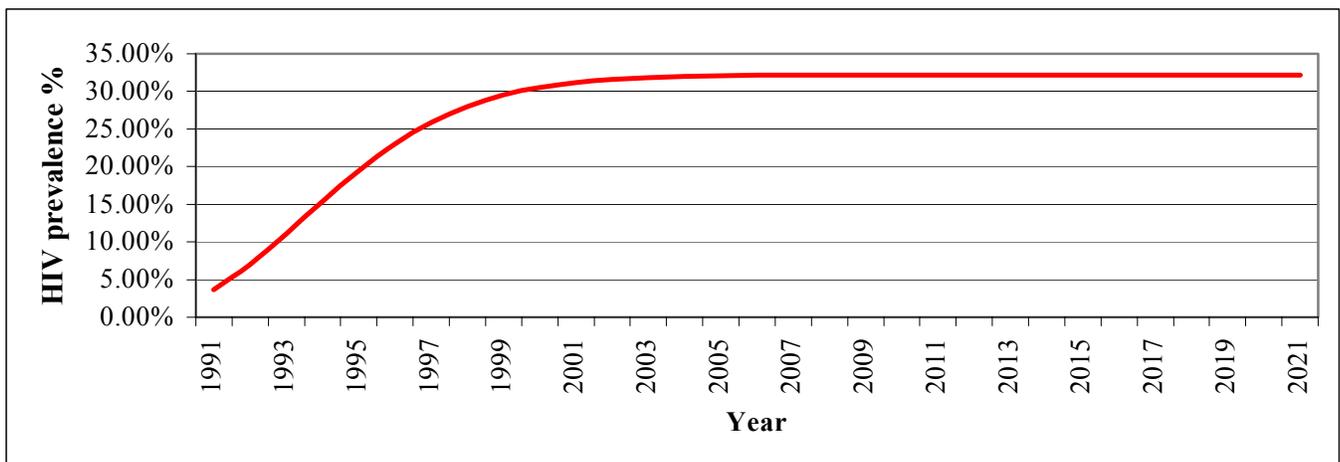
This chapter describes the situation regarding HIV/AIDS in Walvis Bay, its likely impacts on the demography of the city, its economy and community, as well as the local response to the epidemic.

HIV Prevalence

Namibia undertakes antenatal sero-surveillance surveys of the HIV prevalence rate every two years. The last such survey completed was in 2000, and the antenatal prevalence rate in Walvis Bay for that year was 28%. This is the third highest prevalence rate in Namibia after Katima Mulilo and Windhoek.

HIV prevalence in Walvis Bay does appear to be close to its peak. If the epidemic continues to follow past trends, HIV prevalence will peak at 32% by 2004/5. We do not, however, know what will happen subsequent to this, as nowhere in the world has the epidemic yet run its course. However, for the purposes of this study it has been assumed that HIV will remain stable after this peak.

Figure 3.1: Projected HIV Prevalence, Walvis Bay (1991 - 2021)



This high prevalence rate implies that over one third of the population aged 15-49 in Walvis Bay is likely to be infected by 2004. Unfortunately, Namibia's sero-surveillance data do not provide information on prevalence by socio-economic or educational status, and it is thus becomes difficult to assess who is infected and affected by the disease.

The HIV/AIDS prevalence rate is at this level primarily because Walvis Bay attracts high numbers of internal migrants in search of employment. This results in a population with more single males in the economically active age cohorts (15 to 49 years of age) than is the average elsewhere. Studies elsewhere in Namibia have indicated that this group tends to be both younger and less well educated, and, as is known, these factors will encourage riskier sexual behaviours. The town is also a port and road transport centre, accounting for higher than average numbers of commercial and/or transactional sex workers, which also increase the risks of infection in the population.

However, HIV/AIDS affects everyone, *regardless* of his or her economic well being and status in society. Municipal personnel have strong feelings on this, stating in interviews that: 'whether you are black or white, rich or poor, young or old you will be affected by this disease'.

At the same time, the disease is known co-vary with poverty and educational status and Municipal personnel tended to recognise this as they also stated that efforts to prevent HIV/AIDS should be targeted to the youth, the poor and the illiterate.

Poverty is associated with HIV for a number of reasons primarily associated with access to information and medical care. Better-educated individuals have more access to information as to the risks of unprotected sex and frequent partner change and are therefore more likely to change their behaviour. Infection with a sexually transmitted infection (STI) increases an individual's risk of being infected with HIV and poor people tend to have higher rates of STI simply because they have less access to medical care. In addition to these factors, poor

people, and particularly women, may be placed at risk of HIV infection because of behaviours motivated by poverty, such as commercial or transactional sex work. The relationship between HIV and poverty is, however, not a simple one. Many wealthier individuals are also infected. Higher income leads to greater access to resources that can lead to more sexual partners and eventual HIV infection. Infection may therefore occur across income groups, but the ability to cope with infection is more problematic for the poor.

The Demographic Impact of HIV/AIDS on Walvis Bay

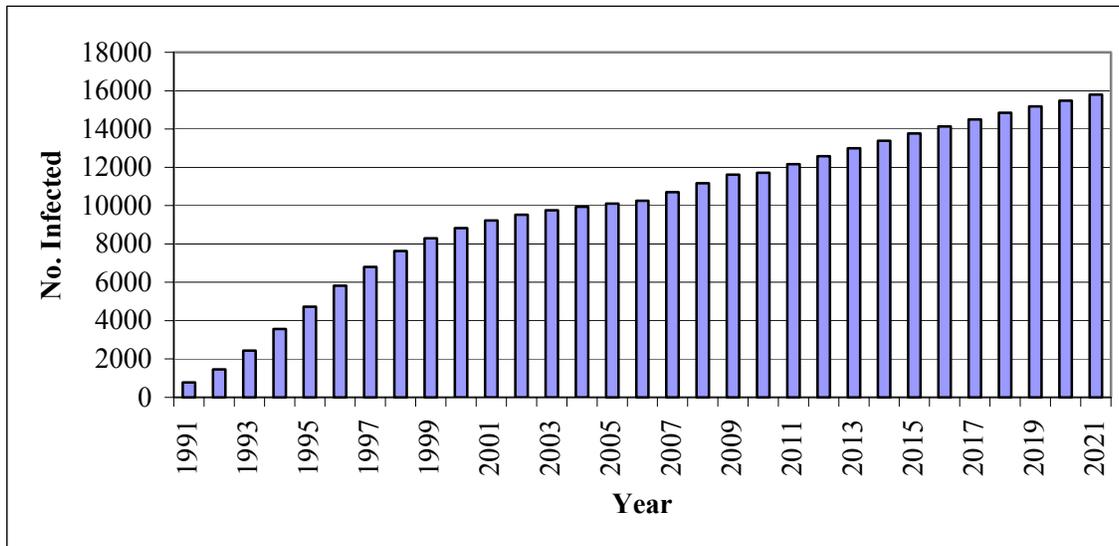
This section discusses the demographic impacts of these high rates of infection on the population of Walvis Bay over the next several years. As mentioned previously, we do not know a great deal about what will happen to HIV prevalence after it peaks. Therefore, while we have a high level of confidence in the number of deaths over the next 10 years, which will result from infections that have already occurred, estimates further into the future must be treated with caution.

The data presented below project the AIDS mortality (or death rate) for Walvis Bay. They are based on projections derived from models of the demographic impact of HIV/AIDS on the general population. The SPECTRUM group of models was used for this purpose and the assumptions and methodology upon which the projections are based are discussed in Annex B to Volume 1 of this report. It is important to note that these assumptions were discussed and agreed at progress meetings held with the Municipality and with the Working Group prior to their incorporation in the model.

Number of People Infected

While HIV prevalence is a useful and important measure of the level of HIV in a community, it is sometimes more meaningful to convert prevalence into the number of people infected. Figure 3.2 displays the number of people infected with HIV given the present prevalence rate in Walvis Bay. As can be seen some 9,000 people are presently HIV- positive, rising to 12,000 individuals by 2012 and just under 16,000 in 2021.

Figure 3.2: Number of People HIV+, Walvis Bay (1991 - 2021)



The figure illustrates the flow of HIV, with the number of people infected in the early stages of the epidemic increasing rapidly. This is because, at this stage of the epidemic, most of those who are HIV positive are newly infected and the mortality (or death) rate is low. There are, therefore, many new infections and few exits from the population (the only exit in the case of AIDS being death). Gradually, the rate at which people are infected slows. The reason for the decline in new infections is because a greater proportion of those vulnerable to the disease are already infected with HIV.

In practical terms, this means that at the beginning of the epidemic, when only one person in the town was infected, those they had sex with ran the risk of infection. In the later stages of the epidemic, an infected person may well have sex with another infected person, and as there is then no chance of a new infection, this results in a slower rate of growth in the epidemic (although the asymptomatic phase of HIV is shortened for two HIV positive sexually active partners because viral loads are increased).

However, as the rate of HIV infection declines the mortality rate increases as more of those who are HIV-positive progress to AIDS and die. At this stage of the epidemic these two factors combine and HIV prevalence stabilises. The number of HIV infected people, however,

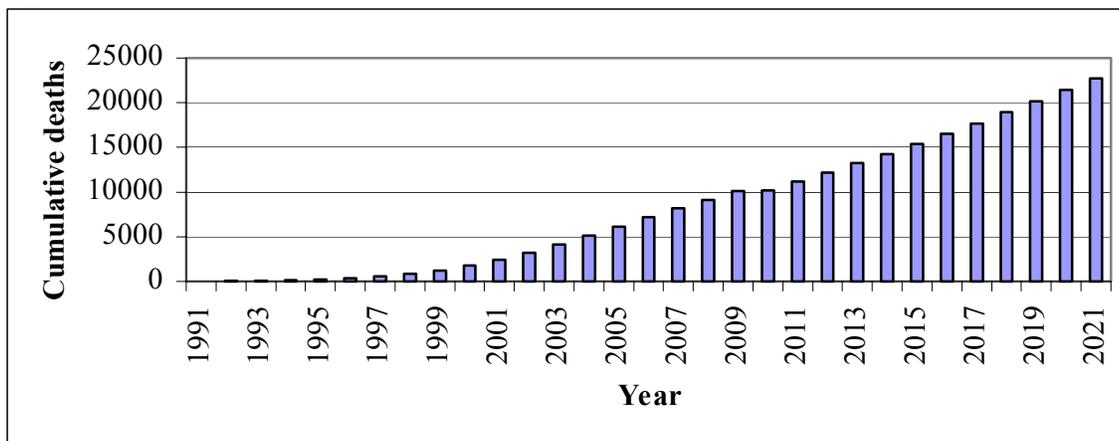
will continue to increase despite a constant prevalence rate because the city's population will grow. The prevalence rate thus remains constant although the number of infected people increases.

This is illustrated in Figure 3.2 above. The number of people infected grew rapidly from the beginning of the epidemic until 2000. The growth rate then slowed, when prevalence was projected to stabilise but the number of people infected will continue to increase as the population of the city grows.

AIDS Deaths

The high HIV prevalence rate in Walvis Bay means that mortality rates in the city will dramatically increase. While HIV prevalence is close to its peak, the lag between infection and death means that the AIDS epidemic is a number of years behind. The AIDS death rate is likely to peak only eight years *after* HIV has peaked. Figure 3.3 displays number of people who have or are expected cumulatively to die of AIDS in Walvis Bay.

Figure 3.3: Cumulative AIDS Deaths, Walvis Bay (1991-2021)



The graph suggests that given the level of infection over 3,000 people in Walvis Bay have died as a result of AIDS to date. By 2010 the figure is likely to be closer to 10,000. The 7,000 deaths expected to occur between now and 2010 are largely unavoidable (without access to anti

retroviral treatment), as these will result from existing HIV infections. Deaths from 2010 onward could be avoided *if* future HIV infections can be reduced. By 2021, cumulative AIDS deaths are expected to exceed 22 000, but it is important to stress that *many* of these can be avoided.

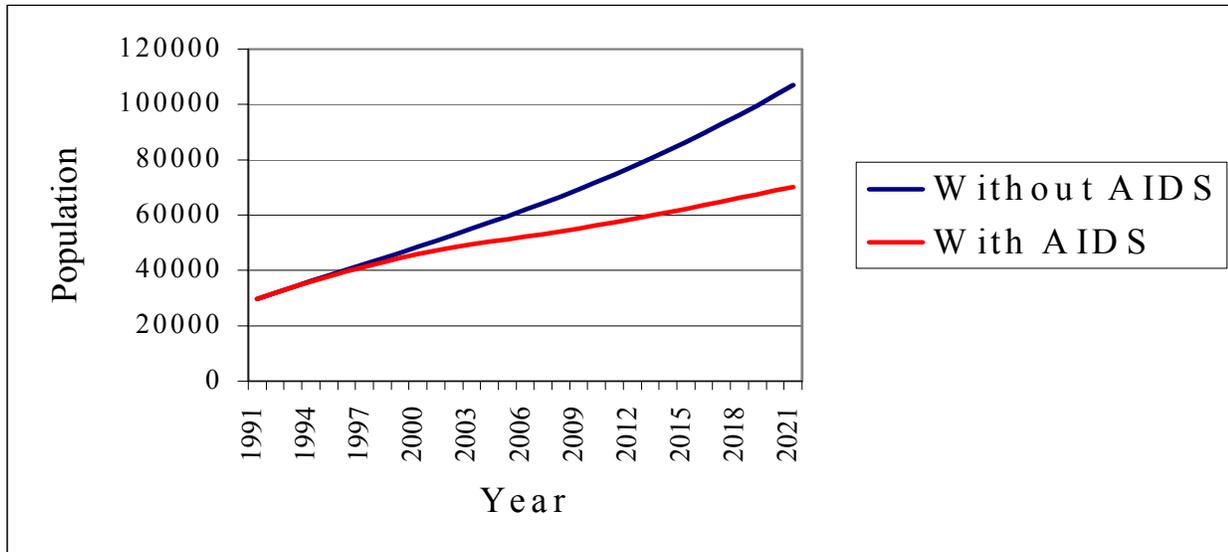
These AIDS-related deaths will decrease the population of the city in two ways. First, the deaths will directly affect the size of city's population as individual residents die. Secondly, HIV/AIDS affects young adults. The death of young adults reduces the number of children born. This is because parents die before the children they would have had if they had remained uninfected have been born. The population of the city is, therefore, smaller as a result of AIDS both because its citizens die and because others are never born.

Encouraging destigmatisation, wellness programmes and positive living for those infected may reduce AIDS deaths, and should this become more widely available in Namibia, through treatment (antiretroviral therapy- ART). Treatment options include the prevention of Mother to Child Transmission (MTCT) which is relatively inexpensive, and now being put in place in many countries in the Southern Africa region with high levels of infection (e.g., Botswana and Swaziland). ART for adults, which although less expensive than previously is unlikely to become widely available in the short to medium term due both to its cost and delivery problems as this therapy requires consistent monitoring by health professionals.

Population Growth

It is, however, expected that Walvis Bay will continue to grow, albeit at a slower rate because of continued high levels of inward migration from other areas of the country. The following figure presents the projected population of Walvis Bay without AIDS and what it is likely to be in the face of the high rates of infection and expected deaths.

Figure 3.4: Population With and Without AIDS, Walvis Bay (1991 - 2021)

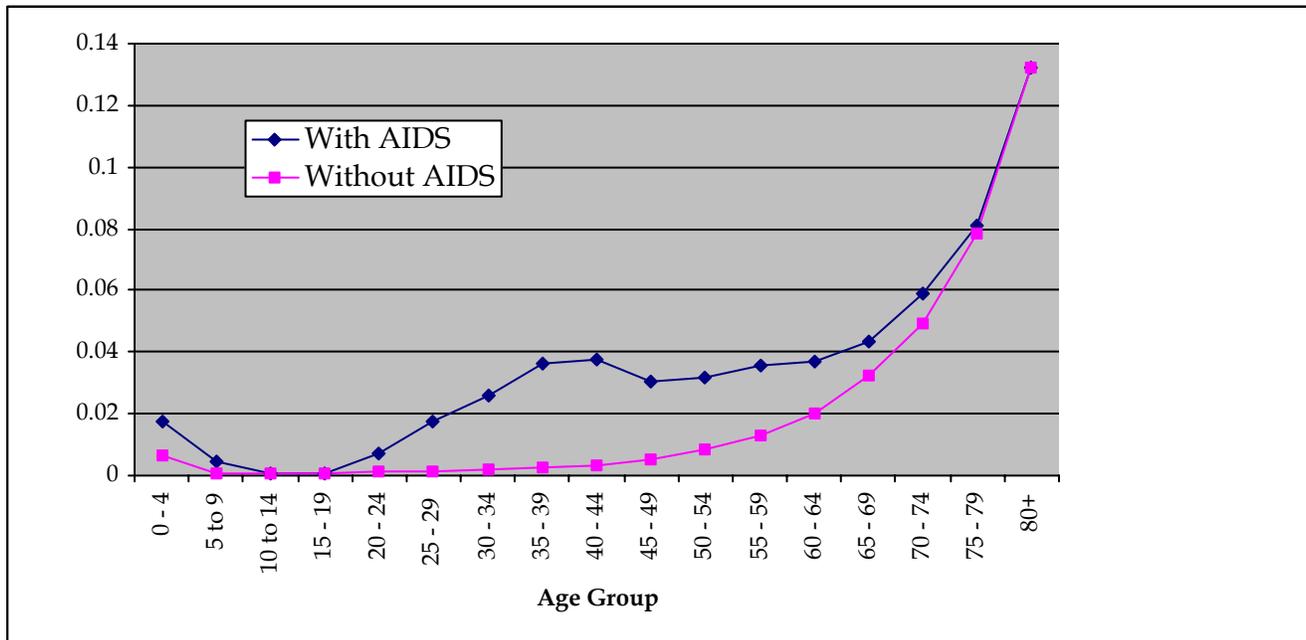


Currently the population of the city is estimated to be about 44,000 individuals. However, in the absence of AIDS the population should have been closer to 52,000 people by 2002. While the population of Walvis Bay will continue to grow, Figure 3.4 shows how much larger it would have been by 2021 in the absence of AIDS.

Mortality Rate

The socio-economic impacts of HIV/AIDS are enormous. This is not only because of the number of deaths and the resultant reduction in the rate of population growth, but because those who are dying are in the productive or working age groups. Unlike epidemics of the past, which targeted the weak, the very young and old, HIV infects the sexually active population, with infection rates highest in the 25-35 year old age group. It is therefore, not only the mortality rate that increases, but also its distribution between age cohorts. Figure 3.5 displays the mortality pattern of Walvis Bay with and without AIDS.

Figure 3.5: Mortality Rates With and Without AIDS, Walvis Bay



The 'Without AIDS' line demonstrates a typical mortality pattern. Between 0 and 4 years of age mortality is relatively high as a result of child illnesses. Mortality then remains low for many years, as few people between the ages of 5 and 30 die, and subsequently increases with age.

The 'With AIDS' line shows how this pattern changes as a result of HIV. Infant and child mortality will be higher as children are infected at birth. Mortality rates between 10 and 15 will be much the same as very few young children are infected with the disease. AIDS mortality then increases dramatically from the age of 20 peaking at between 40 and 45 years of age. What this means is that 40 year old individuals experience a mortality rate typically associated with 70 year olds.

It is this change in mortality patterns which results in the socio-economic impacts discussed below. The age groups with the greatest increases in mortality as a result of AIDS are those most responsible for economic production and social care. They are the workers of Walvis Bay and the parents of children living in the city.

Economic Impact of HIV/AIDS on Walvis Bay

As discussed in the previous chapter, the economy of Walvis Bay is based primarily on fishing and its harbour, with a small but growing retail sector and tourism industry. Many migrants are attracted to the city in search of work within the fishing industry but there is a large seasonal variation in the level of available employment. These factors make employees susceptible to HIV infections as migrant labour, in particular, has long been associated with high-risk sexual behaviours. HIV infections will increase the cost of labour to the industry through increased absenteeism and sick leave, lowered productivity and the loss of people with important experience.

The city has a high unemployment rate (estimated at over 20%). While sick and dying employees can be replaced easily, particularly in the processing operations which rely largely on unskilled labour, the loss of skilled and experienced labour within the industry will become increasingly difficult to replace. However, the success of the fishing industry is determined by many other factors including tide flows and other variables. HIV/AIDS will affect the industry, and increase its costs, but its success from year to year will still largely be influenced by other factors.

The harbour in Walvis Bay is the major port for Namibia. The HIV/AIDS epidemic will again increase the cost of labour in this sector, but this is unlikely to be the greatest impact on the harbour as a result of the epidemic. The level of imports through the port, such as petroleum, is largely determined by the performance of the national economy. The rate of growth of the national economy will be slowed as a result of increased AIDS deaths. The rate at which imports increase will, therefore, also be slowed, reducing the port's growth.

In an effort to diversify and expand its economy an Export Processing Zone (EPZ) was created in the city in 1996. The zone offers various incentives to potential investors, provided they produce solely for export. The HIV/AIDS epidemic has two important implications for

the zone. Firstly, such zones compete internationally for investment. As HIV/AIDS increases the cost of labour it will reduce the Zone's competitiveness. Further research is necessary to establish whether this increased cost of labour will be sufficient to influence investor decisions. If this is proved to be the case, measures could be taken to reduce costs attributable to the epidemic, such as an increase in prevention and treatment, and therefore decrease the disincentive to investors. Secondly, one incentive for investors in the Walvis Bay EPZ is partial reimbursement for training. Increases in the employee death rate because of AIDS will increase the need for training, raising the cost of operating the Zone.

The economic impact will be felt not only at industry level, but also by households and retail businesses. Individual's face reduced productive capacity, often resulting in lowered income, as they become unable to work. At the same time as access to money becomes more difficult, the need to spend on medical and other services increases.

The situation is the same at the household level as individual illness often results in a fall in household income or production. Further, the clustering of HIV infections can worsen the situation. As HIV is primarily a sexually transmitted disease, households tend to suffer from multiple infections. The impact on income and production is then further exacerbated as productive activities and labour resources are diverted towards the care of ill household members. Finally, the illness leads to death and the household is faced with the cost of a funeral. In order to survive these impacts households may be forced to sell assets, borrow money or rely on support from family and friends. While such strategies may dampen impact in the short term, they tend to lead to long term difficulties. Many households in Walvis Bay are poor and will have limited ability to deal with the impacts of HIV. The social consequences of such an inability to cope may be far more profound than the economic impacts.

Affected households typically change the level and composition of the goods and services they demand. Expenditures are shifted toward medical services and away from savings and

other forms of consumption. Retailers and producers will, therefore, be affected in different ways, some will experience an increase in demand and others a decrease. The economic impacts of HIV will, therefore, be felt not only by those infected but also by the entire community.

The Social Impact of HIV/AIDS on the Community

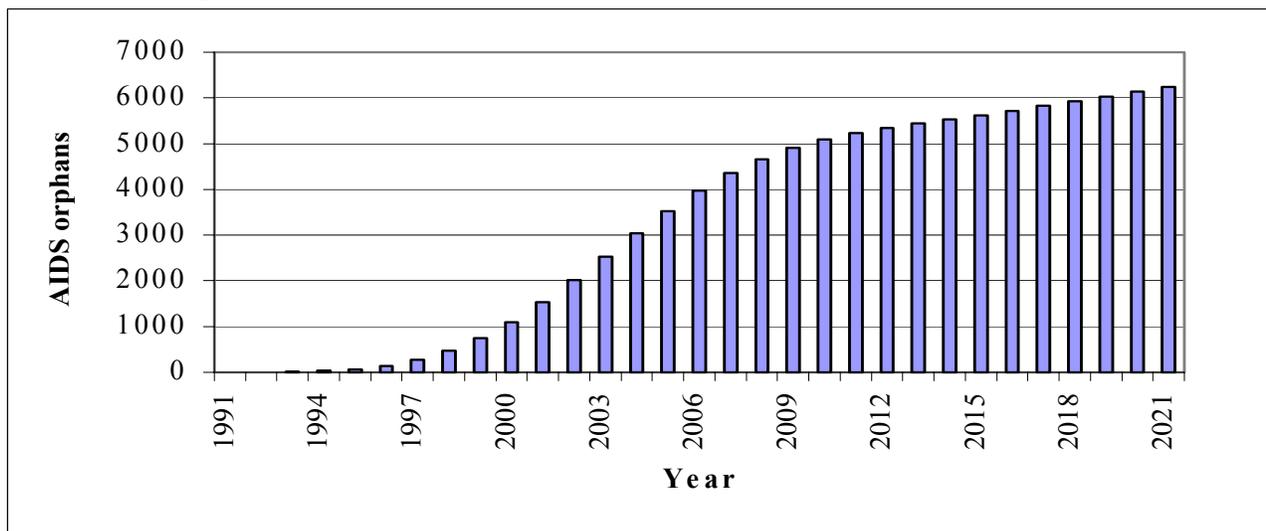
HIV/AIDS profoundly affects families and communities, resulting in the loss of labour and assets, as well as socio-cultural skills, and places almost unprecedented stress on community and extended family networks.

"Some of the most striking images of the HIV epidemic are of families, but of unfamiliar families: a grandparent surrounded by grandchildren, child-headed families, often brothers and sisters and cousins bonded together, dying adults tended by their children and communities of children without parents." Peter Piot, Executive Director, UNAIDS

Orphans

The nature of HIV/AIDS is that it impacts communities and households over many years, and as the rate of illness and death increases, so the structure of these families and communities alters. As noted previously the age groups most affected by the increase in mortality are the worker and the parents. Losses in these age groups will leave many children in the city without parents. The following figure displays the rise in the number of children orphaned as a result of AIDS in Walvis Bay.

Figure 3.6: Orphans as a Result of AIDS in Walvis Bay (1991 - 2021)



It is already estimated that there are over 1,500 children in Walvis Bay who are currently under the age of fifteen and have lost one or both of their parents as a result of AIDS. This number is expected to increase to over 5,000 in the next 10 years. The ability of communities to absorb and care for children who have lost their parents will be strained by the rapid increase in orphans.

The impact of HIV/AIDS on children is arguably the single biggest long-term development impact. Failure to provide appropriate and adequate care for children who have lost their parents has serious implications for their development and their long-term growth towards becoming productive, responsible members of any society.

The impacts of HIV/AIDS will change the demand for and type of services needed. Service providers, primarily governments and municipalities, will be expected to provide increased health and social welfare services, home-based and community care, and meet changing housing and education needs.

At the same time as there is an increase in demand for services the ability to provide these services is eroded as key staff are lost. Nurses, teachers and social workers are not immune from infection and their mortality rates will also increase. The impacts of HIV/AIDS on services will have an impact on the entire community infected or not, orphaned or not.

The Local Response to HIV/AIDS

Walvis Bay has an active community-based HIV/AIDS outreach programme. For the community of Walvis Bay, counselling services are offered at the Multi-Purpose Centre that serves the communities of Kuisebmond and Narraville. The municipality built the Centre with funding from the US Department of Defence and other donors. It offers a range of HIV/AIDS services as well as legal assistance programmes and recreational and cultural

activities to the wider community. One member of the municipality is involved in this programme and the services are available both to Municipal personnel and community members.

Since its inception, over 10,000 people have utilised various services provided by the Multi-Purpose Centre. The Centre provides an enabling environment for HIV/AIDS services, including those related to those living with AIDS, home based care, counselling and peer education.

Other AIDS Support Organisations (ASOs) operating in Walvis Bay on which information was available include Catholic Aids Action (CAA). This organisation provides Information, Education and Communication (IEC) through Catholic parishes and community organisations. In order to provide these services the NGO is based at the Multi-Purpose Centre. Outreach to youth through peer education, volunteer training and support to provide IEC and care to households, support for positive living, are among the services provided. Training programmes in counselling and home based care are provided to church and community leaders. CAA has 35 active volunteers in Kuisebmond and 20 in Narraville who are involved in the activities above. Their records indicate that they support 3000 registered HIV infected people.

At present, little is being done among the Walvis Bay business community to mitigate the impact of AIDS, although many operators recognise that it threatens profitability. Fifty three percent of businesses interviewed in Walvis Bay perceived AIDS have a threat to their operations, but only 30% had a workplace programme in place. These programmes were mainly centered on condom distribution and only 13% of these companies had spent any money on their AIDS prevention programme and only 14% had assigned a staff member to be responsible for coordinating this programme.

Further information on AIDS Support Organisations (ASOs) operating in Walvis Bay can be found in Annex A to this report.

Chapter 4: The Impact of HIV/AIDS on the Municipality of Walvis Bay

Introduction

This chapter reports on the impact of HIV/AIDS on the Municipality of Walvis Bay. First, the ways in which HIV/AIDS affects municipalities are outlined. This is followed by a discussion on the internal impacts that are subsequently costed.

The next section of the chapter examines the external impacts of the epidemic in more detail, those affecting the Walvis Bay community, the quality of life in the town, its economy and the impacts on the demand for and ability to pay for Municipal services, affects the municipality itself.

Impacts of HIV/AIDS on the Municipality of Walvis Bay

HIV/AIDS results in demographic, social and economic changes in society, changes that will continue to affect both the public and private sectors in Namibia for the foreseeable future. The Municipality of Walvis Bay will not be exempt from these impacts.

At the outset, what needs to be understood is that HIV infection precedes illness and AIDS death by some six to eight years, and for much of this time the disease remains invisible in those who are infected. It is only over the last several years of the individual's life as HIV progresses towards AIDS that the frequent bouts of increasingly more severe illness are experienced. In other words, the AIDS mortality presently being experienced within Walvis Bay Municipality results from HIV-infections acquired some six to eight years ago. The full impact of AIDS on the Municipality

"HIV/AIDS is a big problem if one looks at the number of people dying within of the municipality. For some it was known to be AIDS, while for others it was not". SWAG Participant

is only likely to be felt between 2008 and 2010 when the numbers of those falling ill and dying will reflect the currently high prevalence rate. This is what makes the immediate implementation of planning for the impact of AIDS illness and death within the municipality so important so as to prevent future infections, mitigate the impacts of the disease on the functioning of the Municipality and reduce the costs of the epidemic.

The challenge is that the epidemic erodes the ability of institutions, including local authorities, to provide services, as it reduces *both* efficiency and revenues, while the personnel losses induced by HIV/AIDS affect the quality of services provided. These impacts result from the sickness and death of municipal personnel infected with HIV, and can include:

- loss of productivity;
- increased absenteeism;
- cost of sick and compassionate leave;
- increased cost of benefits; and
- increased recruitment and training costs to replace lost staff members.

Studies (in West Africa) have demonstrated that HIV-positive individuals generally lose some four to six months of work time prior to the onset of AIDS, following which s/he is often absent from work, until death (Carr-Hill, Katabaro and Katahoire, 2000). The reality in Southern Africa appears to be an increasing frequency of bouts of illness and thus the loss of productive work time until death. There is thus a system-wide loss of experience and professionalism as the replacement and managerial stock, if available, becomes increasingly under-trained and under-experienced over time.

Other losses are less easily quantified, such as those relating to the loss of experience (including institutional memory) and the effect of the illness and death of colleagues on staff morale.

Further, more managers and other skilled personnel will need to be trained within a given period of time than would otherwise have been the case. This results in increased expenditure on training (and recruitment) without an expansion in the supply of personnel

overall, with less funding available for quality and service improvements. Similarly, recruitment costs increase. However, the largest costs to any system remain those from increased benefit payments and absenteeism due to illness, caring for sick family members and funeral attendance.

The epidemic will also impact on revenue generation within the Municipality. Households infected or affected by HIV/AIDS will be less likely to be able to pay assessment rates and for services received. The demand for some services (e.g., water) is likely to increase over the short to medium term, but decrease over the longer-term, but with lowered ability to pay. As the numbers of these impacted households increase, the town's revenue base is eroded.

Simultaneously, AIDS affects the national economy (through the loss of skilled labour, reduced productivity as well as declining savings and investment, etc). In countries where prevalence rates are 20% or higher, such as Namibia, GDP growth rate is expected to decline by between some 1.5% to 2.6% points solely as a result of the disease. By 2020, GDP would thus be 30% to 50% lower than it would have been (Bonnel: 2000). While no detailed studies have been done on the macro economic impacts of HIV and AIDS in Namibia, the Government of Botswana has commissioned such a study. It concluded: "AIDS is a development of such proportions that it will inevitably have an impact on government revenues and spending, and therefore on the budget balance and government saving or borrowing. AIDS will have direct effects on some key areas of government spending, most obviously the health budget, but there will also be a range of indirect effects as the ability to raise tax revenues is affected." (BIDPA, 2000).

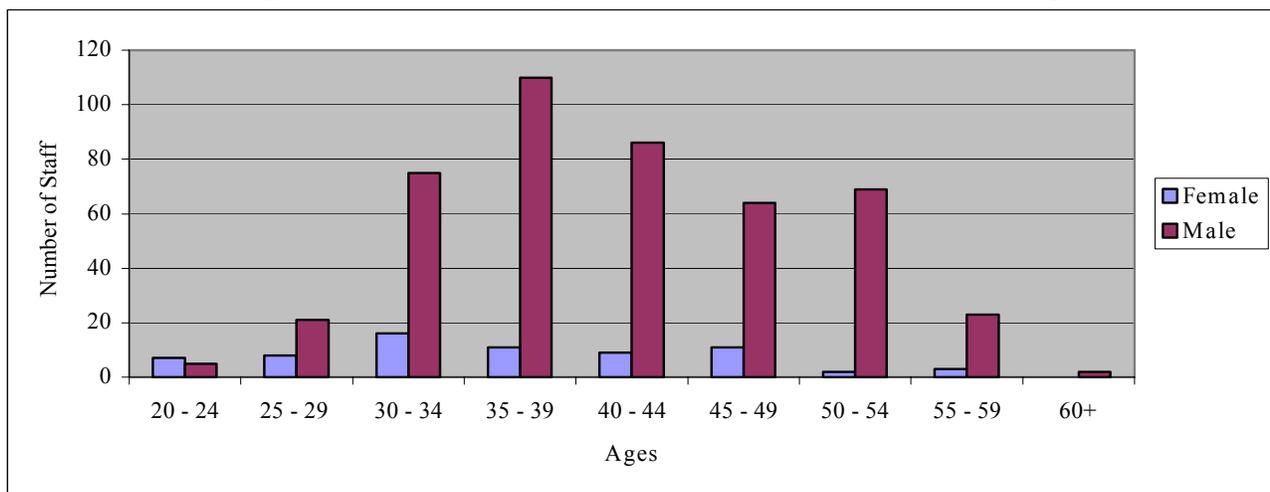
Thus at the macro level, the epidemic will reduce Government's ability to commit funds to local government, in the form of subsidies, grants and development loans, as AIDS-related demands from all sectors on available resources increase while revenues themselves decrease.

The remainder of this chapter discusses these impacts on the Municipality of Walvis Bay.

Demographic Impacts

In 2001, Walvis Bay Municipality employed 522 individuals. The majority were males between the ages of 30 and 44, with only 67 were female staff (12.8%). The following figure illustrates the age and gender breakdown of municipal staff in Walvis Bay. Of concern, is that many Municipal staff are in the age ranges most likely to become infected with HIV - 20 to 30 years of age for females, and 30 to 40 for males.

Figure 4.1: Municipal Personnel by Age and Gender, Walvis Bay Municipality (2001)

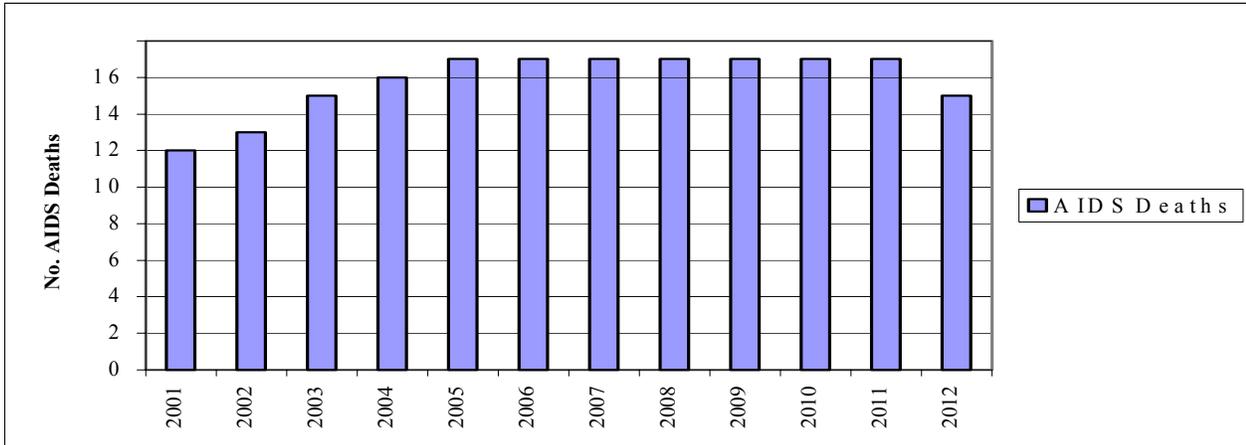


The demographic impacts of the epidemic on this sub-population of municipal employees were then projected using the SPECTRUM model with data developed for the overall population of Walvis Bay. The period 2001 - 2012 was chosen for these projections, as it is assumed that the Municipality will strengthen its efforts to prevent further infections and thus prevent increased mortality over time.

AIDS Deaths

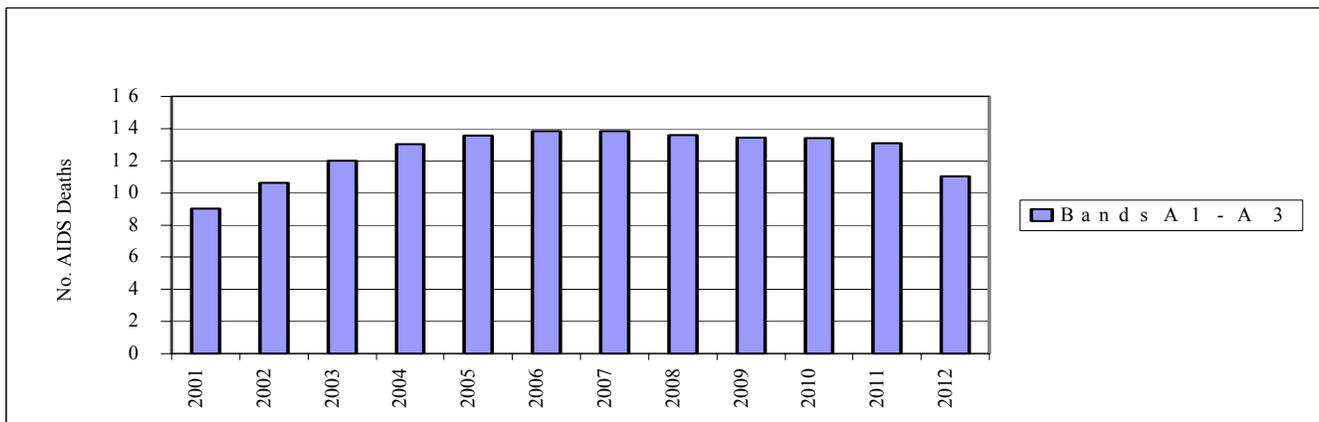
Between 2001 and 2012, Walvis Bay municipality is projected to lose some 190 staff across all bands as a result of AIDS. These deaths will peak over a five-year period from 2005 until 2010, during which period some 80 staff are projected to die of AIDS. The AIDS mortality rate for the Municipality is illustrated in the following figure:

Figure 4.2: Total AIDS Mortality, Walvis Bay Municipality (2001 - 2012)



The Municipality uses the Patterson Bands (A to F) staff grading system, with band A being lower level, unskilled labourers. There are 296 staff in the three A bands within the Municipality or 57% of the workforce. Over the next ten years, annual AIDS mortality among these personnel will amount to some 150 deaths, increasing from eight in 2001/2 to fourteen deaths by 2008, levelling at an estimated ten deaths each year thereafter.

Figure 4.3: Total AIDS Mortality, Band A1 to A3, Walvis Bay Municipality (2001 - 2012)



Among all other Bands (B through F), some forty deaths are anticipated over the eleven year projection period.

These levels of AIDS mortality will impact on the Municipality through increased absenteeism (sick and compassionate leave), productivity losses and increased replacement and training costs. These impacts will require management and planning, and are discussed below.

Human Resources Management Information System

The initial, and critical, step in managing the impacts of the epidemic upon the municipality itself is to make available data on personnel leave and absence from duty, by type (i.e., whether sick leave, casual leave for funeral attendance, etc., age and gender profile, etc. This permits managers to analyse trends and costs and indicates where the loss of critical personnel may occur allowing time for preliminary and succession planning, etc.

The Municipality maintains a Human Resources Information System capable of providing the data needed to manage and plan for the epidemic. This presently provides quarterly information on leave taken by staff to their managers. The data are disaggregated by department. Some adjustments would need be made in order to provide monthly information on leave taken, by type (including, if possible, compassionate leave) and the cost of these to the Municipality.

Sick Leave

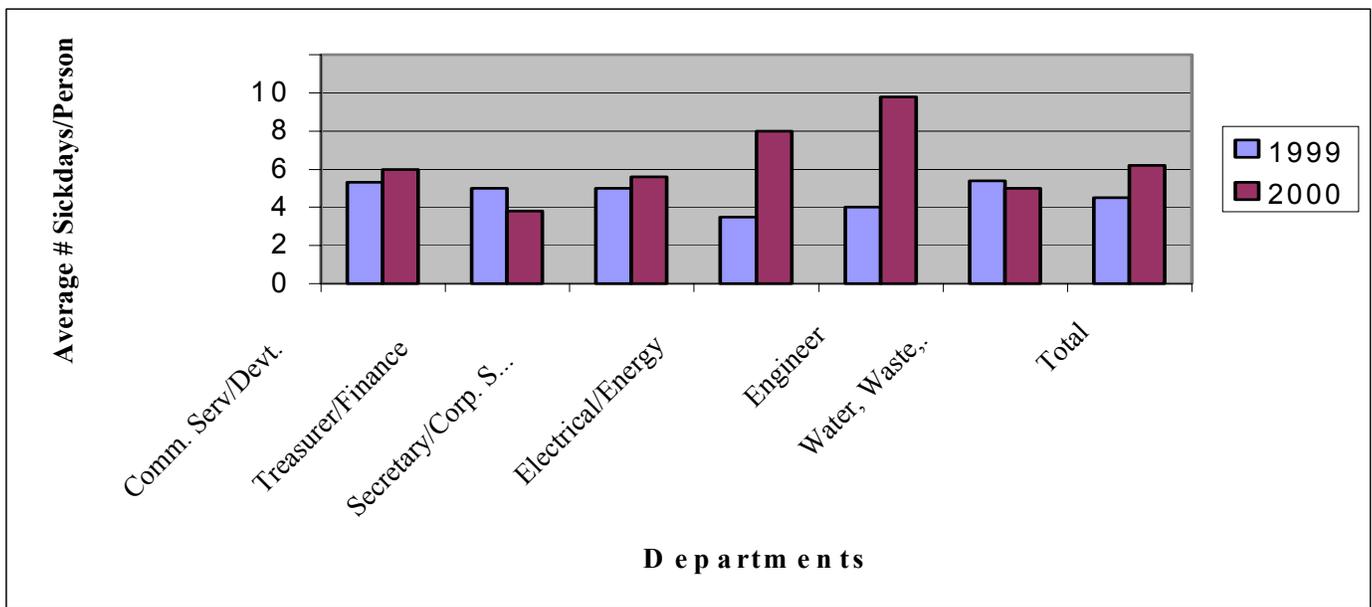
Municipal sick leave policy is determined by the Local Authorities Act and employees are entitled to 120 days sick leave at full pay over any thirty-six month period, which can be followed by 120 days of sick leave at half pay over a similar time period.

The reality of HIV/AIDS is that an employee who has AIDS becomes progressively ill, experiencing bouts of sick leave, generally over the last 12 to 18 months of their life. During this period, the individual remains on the payroll and cannot be replaced and is substituted by colleagues who act on their behalf, or by temporary appointments.

Walvis Bay maintains data on sick leave taken by employees and as the following figures demonstrate this does appear to have increased over the past several years.

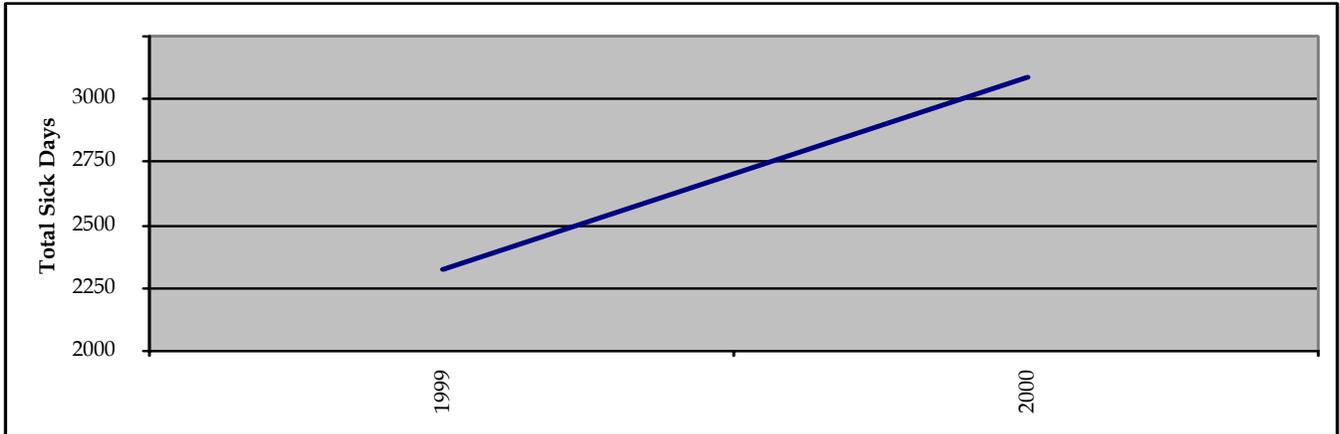
In Figure 4.4 below, the average number of sick days per absent employee is shown by department. With the exception of the Departments of Water and Waste Management and of the Town Treasurer/Finance, all departments experienced an increase in the average number of days taken per sick leave between 1999 and 2000 (the years for which data was available).

Figure 4.4: Average Sick Days per Year by Department (1999-2000)



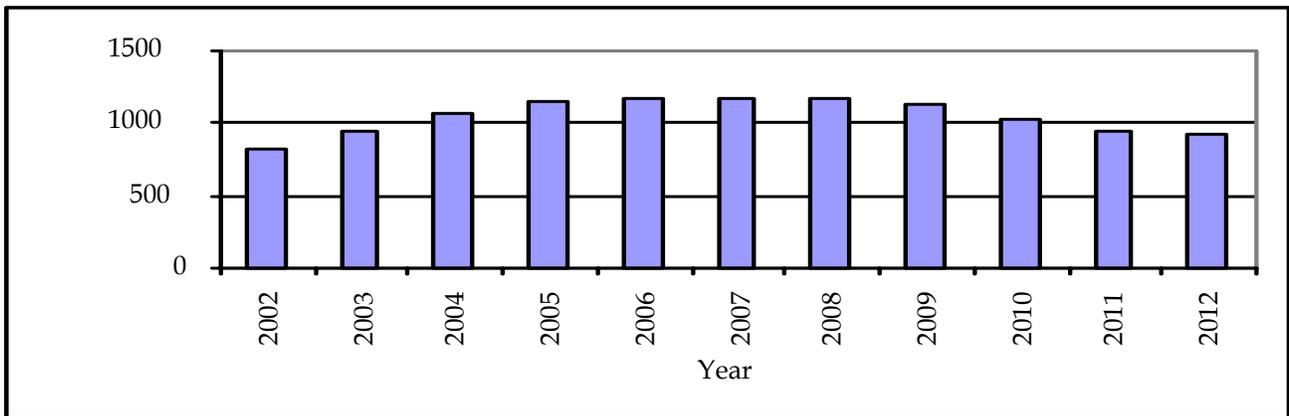
The following graph illustrates the total number of sick days taken by all Municipal staff over the two years for which data were available. These increased from approximately 2,400 days in 1999 to 3,100 the following year.

Figure 4.5: Total Sick Leave Days by Year, Walvis Bay Municipality (1999 - 2000)



Using data made available by the municipality, sick leave for AIDS related illness was analysed, and then projected. This analysis is based on the number of sick leave days taken by employees and recorded by the municipality. The average number of sick leave days taken has been increasing and is assumed generally to be a result of AIDS-related illness as there have been no dramatic increases in the number of employees. From the demographic projections used in this report, it was possible to estimate the level of AIDS related illness over the period which sick leave has increased. It was then calculated how many days sick leave those who were ill are likely to have taken to account for this increase in sick leave. This estimate was then used to project sick leave sick individual) to the number of estimated future deaths. Findings indicate that the number of sick leave days solely related to AIDS taken by Walvis Bay municipal staff will increase from just over 750 days in 2002 to 1,100 days by 2009, following which it is expected to decrease to around 900 days. Obviously, the costs of this will be high and programmes that encourage positive living and wellness could assist in reducing these.

Figure 4.6: Projected AIDS-related Sick Leave, Walvis Bay Municipality (2002 - 2012)



Compassionate Leave

The Municipality permits employees to take compassionate leave. The allowance is three days per death up to a total of ten compassionate leave days per year. In addition, three days are allowed to care for a sick relative or person. While no data was provided on the amount of compassionate leave taken by Municipal personnel, evidence from elsewhere in the region suggests that this is increasing exponentially. The Municipality needs to collect data on this type of leave, by whether the days taken are for a death or care of a sick member of the household, and analyse its cost on a monthly basis.

Training

The Municipality has a training programme in place, in part due to its Affirmative Action Plan. Two hundred and forty nine staff received training in 2001 at a cost of N\$388,500 at an average cost of approximately N\$1,500 per trainee. The training available to employees ranges from tertiary degrees at external institutions, to specialised courses and literacy training.

The following table provides data on the average cost per level of staff trained:

Table 4.1: Average Training Costs, Walvis Bay Municipality (2001)

Skill Level	# Trained	Average Cost/Trainee (N\$)
Senior Management	24	3,000
Mid level Management	11	3,000
Specialised Skills/Snr. Supervisors	40	2,500
Skilled	15	2,000
Semi-skilled	46	1,500
Unskilled	169	497

HIV/AIDS will increase the need for training of Municipal personnel, as employees are lost to the epidemic early in their careers. Equally, the private and other sectors, offering higher salary and benefit packages, will increase the rate at which they "poach" trained staff as they in turn lose employees. This is likely to be particularly true for skilled Municipal staff and those trained to degree level. This, in its turn, will increase the costs of training provided by the Municipality as it further increases staff turnover.

Municipal training policies, therefore, need to include strategies for maintaining and developing skilled staff. These have to be based on the provision of more frequent, but shorter-term training opportunities, within affordable cost parameters.

Staff Attrition

Municipal data on staff turn over was not disaggregated by the reason for resignation or retirement. It was thus not possible to conduct a termination audit.

Pension Fund

Walvis Bay municipality employees are members of one of two pension funds - the Walvis Bay Municipal Pension Fund and the Retirement Fund for Local Authorities in Namibia. While no data was made available on the Walvis Bay Municipal Fund, the majority (70%) of employees belong to the latter fund.

The Retirement Fund for Local Authorities in Namibia operated as a defined benefit fund until 1992, when due to the large number of claims it changed to a defined contribution fund. This means that the amount paid to member's families on their premature death was reduced.

In April 2000, the fund further reduced the level of its death benefits, as these payments had become unsustainable due to the high number of claims, which were resulting in an increase in the cost of premiums.

Prior to April 2000, the fund provided a benefit payment equal to three times annual salary as lump sum at the death of a member, plus a monthly income of 50% of base monthly salary and 10% for five minors up to the age of 25, providing they were attending an institution of higher learning. Employers pay into the fund 21.7% of the employee's base monthly salary, of this amount 14% is used for investment, 6% goes to pay death benefits and 1.7% provides for the fund's administration. Employees contribute 10% of base monthly salary to the fund.

The current death benefit allows for a once off lump sum payment of 5.3 times annual salary at the death of a member, three differing options based on the level of guarantee and investment. This amount is not fixed and will be reduced if found to be too expensive.

The Retirement Fund for Local Authorities in Namibia Investment Report of 31st December 2001 reveals that the fund had investments in Namibia and South Africa, whose market value totaled some N\$ 3.7 billion. The rate of return on these investments over the past 10 years was 16.3%.

As at the valuation date, the contribution rate required to cover the cost of risk benefits and other expenses, expressed as a percentage of pensionable salaries, was estimated as follows:

Table 4.2: Contribution Rate Required

Benefit Type	Percentage
Death Benefits	4.80
Disability Benefits	1.20
Total Risk Benefit Contribution	6.00
Expenses	1.70
Required Contribution Rate	7.70

The current contribution rate is therefore sufficient to provide for the risk benefits and the expenses. If, however, deaths increase while benefits and contributions remain constant, the required contribution for risk benefits will increase leaving less available for pensions.

In sum, the funds operate on the basis of defined contribution (as opposed to defined benefit), that is, the benefits received are determined by the amount of the contribution made by and on behalf of the employee, and the return on the investments made by the fund. This, while protecting the Fund for depletion resulting from the increased costs of AIDS mortality, does not reduce the cost of the epidemic. It merely switches these costs from the Fund to members, and the households and the communities in which they live.

The impact of HIV/AIDS has caused the funds to lower the death benefits and to increase the cost to the members. This trend will continue as more members die from the diseases associated with AIDS and the death benefits claim continues to rise.

Critical Functions and Posts

Many of the costs associated with HIV/AIDS can be identified and with some difficulty quantified. Many, however, are more difficult to determine and these less obvious costs and consequences may be larger and more important. These include the loss of institutional memory, the impact on staff morale, and the inability to perform critical functions as a result.

This Assessment attempted to identify critical posts through the key informant interviews. Those interviewed were first asked to identify essential and critical functions in their departments or sections. Following this, they were asked to identify the posts critical to achieving these functions.

In most instances, managers were able to identify critical functions. The identification of the posts (i.e., individuals) fulfilling these functions became more difficult. It should be noted that these posts are often not those filled by the most skilled or highly educated staff. They can be posts filled by individuals who have unique experience in a task requiring a particular set of skills. A detailed critical post analysis will need to be undertaken by the Municipality.

The epidemic will increase the demand, from the existing population, for services across many municipal departments, but particularly those responsible for water, refuse removal, housing, etc. At the same time, the human resource management functions will increase, as staff will need to be recruited and trained to replace those lost to the epidemic. Attention will need to be paid to strengthening these departments where increased service delivery will be required as a result of the epidemic

Services and Planning

Demand for the housing and services lie primarily in the city's north and eastern neighbourhoods (i.e., Kuisebmond and Narraville) where over 80% of Walvis Bay's population lives. Kuisebmond, in particular, is the area of settlement for new migrants and is rapidly densifying.

The demographic projections discussed in Chapter 3 indicate that the city's growth rate period will be reduced by the epidemic over the next twenty years. By 2010 the population of the town will be 20% smaller than it would have been in the absence of AIDS, and by 2021 it will be over 30% lower.

However, given the backlog in housing, erven and service delivery, it is unlikely that the reduced growth rate of the city's population will permits any reduction in the planned delivery in the north and eastern areas over the next ten years. What this reduced growth rate does imply is a decrease in the rate at which service delivery would need to be increased over the next ten years in order to accommodate new migrants who will continue to arrive in Walvis Bay.

Succession Planning

Succession planning is in place as part of the Municipality's Affirmative Action Policy and Programme. Succession plans are being introduced and training will be given to "understudies" to prepare them for new posts and responsibilities. This planning will need to be widened to include succession planning for posts identified as critical as a result of this Assessment of the Impact of HIV/AIDS.

Governance

In Namibia municipal and town council officers are democratically elected to provide service to their communities. They thus become the tier of government closest to the people they serve. The HIV/AIDS epidemic will impact on the process of local elections and the relationship between councillors and those they represent.

Firstly, councillors, as elected representatives, will be expected by their communities to lead the local response to the epidemic. This entails not only ensuring that the local authority manages and plans for service provision in the face of the impacts of HIV/AIDS, but that it actively develops and implements efforts to prevent infection and provide support to those who are infection at the grassroots level. As the impact of the epidemic deepens over the next ten to eight years, the local electorate will demand that councillors respond. If they fail to do so, voters may become increasingly dissatisfied and may vote office-holders out of office, shift their support to alternate parties, or even stop voting altogether.

Secondly, councillors themselves will not be immune from the epidemic. They too will be faced with the illness and death of relatives and friends, adding to their burden as elected officials. In addition, some will themselves be infected with the virus. Already, anecdotal stories and first-hand reports from countries in the region tell of HIV infection among senior officials, and local councillors cannot assume that they or some of their colleagues will not also be infected and become ill from this disease.

Thirdly, the epidemic will reduce the resources available for municipal-level service provision, by reducing the tax base or redirecting resources to AIDS-specific programmes and services. This reduction in resources, combined with the reduction of capacity at the local level, will occur at the same time that the epidemic results in increased demands for local government support and services.

Fourthly, the epidemic has the potential to impact on the electoral process itself. AIDS could make elections more difficult and more expensive to hold, by affecting some of the officials and civil society representatives who administer elections, and by complicating the process of ridding voter rolls of those who have died as a result of the epidemic. In addition, residents may be less likely to vote if they are ill or occupied with caring for an ill family member. AIDS will also cause increased illness, retirement, and death of elected officials, which will result in more frequent bye-elections, further increasing costs to the municipality. In addition, bye-elections usually have much lower turnout than general elections, which means the officials elected in this way may have less support from and connection to individual voters and the communities that they serve.

Costs

In order to estimate the cost of the epidemic to the local authority a simplified model was developed as a guide to where the major costs of the epidemic will lie. The assumptions behind these costs are discussed in Annex C to this report that contains the detailed costing

tables, the notes and assumptions on each of the costing sheets used. Copies of the model will be made available to each of the municipalities, so that they can be used as an ongoing planning tool. The assumptions upon which the following figures are based will need to be updated and modified, as improved data becomes available.

For Walvis Bay, the main costs will lie in increased absenteeism, medical aid contributions and productivity losses. Over the nine year period (2002 - 2010) the present value cost will be N\$4,479,675 across all bands. The following table provides data on these increased costs by band. The figures are discounted totals, i.e., are shown at present value.

Table 4.3: Total Increased Costs Resulting from the Epidemic by Band, Walvis Bay Municipality (2002 - 2010)

Band	2002	2003	2004	2005	2006	2007	2008	2009	2010
A1	137,295	155,826	166,397	173,164	176,799	176,632	176,408	174,881	168,044
A2-3	59,992	63,021	68,738	71,002	67,609	64,339	61,210	58,232	51,373
B	75,277	87,523	93,217	88,874	84,620	80,493	76,536	65,539	51,352
C - F	115,174	128,083	147,086	157,890	150,332	143,006	135,981	116,108	90,406
All Bands	387,738	427,033	459,968	467,352	448,014	426,233	405,365	364,164	306,869

The following tables present the breakdowns for each band. The detailed working table, explanations and calculations are contained in Annex C to this report. It should be noted that the mortality rates and sick leave data used are taken from data contained in the two previous chapters of this report.

Table 4.4: Total Increased Costs Resulting from the Epidemic on All Bands, Walvis Bay Municipality (2002 - 2012)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	11	12	15	17	18	18	18	18	18	15	14
Sick leave											
Days	820	953	1075	1143	1155	1155	1155	1125	1022	910	827
Cost	160316	188559	221342	240331	241956	241956	241956	231676	197948	168508	156635
Compassionate leave cols	4360	4620	5776	7308	7568	7568	7568	7568	7568	5512	5140
Productivity	100416	129934	150350	159793	160956	160956	160956	141200	116651	103749	96911
Recruitment	3427	3739	4673	5296	5608	5608	5608	5608	5608	4673	4362
Training	7477	7789	9970	12774	13085	13085	13085	13085	13085	9347	8412
Sub total	275996	334640	392111	425502	429174	429174	429174	399138	340861	291789	271459
Benefit increase	91595	91595	91595	91595	91595	91595	91595	91595	91595	91595	91595
Compassionate leave family	20146	22149	23408	23921	23795	23225	22459	21683	20930	20402	20101
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	111741	113744	115003	115516	115390	114820	114054	113278	112525	111996	111696
Total	387738	448385	507115	541018	544563	543993	543228	512415	453385	403786	383155
Discounted total	387738	427033	459968	467352	448014	426233	405365	364164	306869	260284	235224
Present value cost	4188242										

Table 4.5: Total Increased Costs Resulting from the Epidemic on Band A1, Walvis Bay Municipality (2002 - 2012)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	7	8	10	10	11	11	11	11	11	10	10
Sick leave											
Days	536	618	665	696	709	709	709	699	668	627	565
Cost	69615	80340	86450	90480	92105	92105	92105	90805	86775	81510	73450
Compassionate leave cols	1820	2080	2600	2600	2860	2860	2860	2860	2860	2600	2600
Productivity	28841	35178	37505	40092	41256	41256	41256	41256	38669	37505	32331
Recruitment	2181	2492	3116	3116	3427	3427	3427	3427	3427	3116	3116
Training	2181	2492	3116	3116	3427	3427	3427	3427	3427	3116	3116
Sub total	104637	122583	132786	139403	143075	143075	143075	141775	135158	127846	114612
Benefit increase	26770	26770	26770	26770	26770	26770	26770	26770	26770	26770	26770
Compassionate leave family	5888	6473	6841	6991	6954	6788	6564	6337	6117	5963	5875
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	32658	33243	33611	33761	33724	33557	33334	33107	32887	32732	32644
Total	137295	155826	166397	173164	176799	176632	176408	174881	168044	160578	147256
Discounted total	137295	148406	150927	149585	145453	138396	131639	124285	113739	103510	90403
Present value cost	1433637										

Table 4.6: Total Increased Costs Resulting from the Epidemic on Band A2/3, Walvis Bay Municipality (2002 - 2012)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	2	2	2	3	3	3	3	3	3	3	2
Sick leave											
Days	135	145	176	193	193	193	193	193	183	152	131
Cost	25110	26970	32736	35805	35805	35805	35805	35805	33945	28179	24366
Compassionate leave cols	744	744	744	1116	1116	1116	1116	1116	1116	1116	744
Productivity	18916	23008	26710	28374	28374	28374	28374	28374	24282	20581	18916
Recruitment	623	623	623	935	935	935	935	935	935	935	623
Training	1869	1869	1869	2804	2804	2804	2804	2804	2804	2804	1869
Sub total	47263	53215	62682	69034	69034	69034	69034	69034	63082	53615	46519
Benefit increase	10435	10435	10435	10435	10435	10435	10435	10435	10435	10435	10435
Compassionate leave family	2295	2523	2667	2725	2711	2646	2559	2470	2384	2324	2290
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	465	12958	13101	13160	13145	13080	12993	12905	12819	12759	12725
Total	59992	66173	75783	82194	82179	82114	82027	81939	75901	66373	59243
Discounted total	59992	63021	68738	71002	67609	64339	61210	58232	51373	42785	36370
Present value cost	644671										

Table 4.7: Total Increased Costs Resulting from the Epidemic on Band B, Walvis Bay Municipality (2002 - 2012)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	1	1	2	2	2	2	2	2	2	1	1
Sick leave											
Days	80	111	127	127	127	127	127	117	86	66	66
Cost	25281	35139	40386	40386	40386	40386	40386	37206	27348	20829	20829
Compassionate leave cols	636	636	1272	1272	1272	1272	1272	1272	1272	636	636
Productivity	23166	29495	32341	32341	32341	32341	32341	25345	19016	16170	16170
Recruitment	312	312	623	623	623	623	623	623	623	312	312
Training	1558	1558	3116	3116	3116	3116	3116	3116	3116	1558	1558
Sub total	50953	67139	77737	77737	77737	77737	77737	67561	51375	39505	39505
Benefit increase	19939	19939	19939	19939	19939	19939	19939	19939	19939	19939	19939
Compassionate leave family	4386	4822	5096	5207	5180	5056	4889	4720	4556	4441	4376
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	24324	24760	25034	25146	25118	24994	24828	24659	24495	24380	24314
Total	75277	91899	102771	102883	102856	102731	102565	92220	75870	63884	63819
Discounted total	75277	87523	93217	88874	84620	80493	76536	65539	51352	41180	39179
Present value cost	783789										

Table 4.8: Total Increased Costs Resulting from the Epidemic on Band C-F, Walvis Bay Municipality (2002 - 2012)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	1	1	1	2	2	2	2	2	2	1	1
Sick leave											
Days	70	80	107	127	127	127	127	117	86	66	66
Cost	40310	46110	61770	73660	73660	73660	73660	67860	49880	37990	37990
Compassionate leave cols	1160	1160	1160	2320	2320	2320	2320	2320	2320	1160	1160
Productivity	29493	42253	53795	58986	58986	58986	58986	46226	34684	29493	29493
Recruitment	312	312	312	623	623	623	623	623	623	312	312
Training	1869	1869	1869	3739	3739	3739	3739	3739	3739	1869	1869
Sub total	73144	91704	118906	139328	139328	139328	139328	120768	91246	70824	70824
Benefit increase	34452	34452	34452	34452	34452	34452	34452	34452	34452	34452	34452
Compassionate leave family	7578	8331	8805	8998	8950	8736	8448	8156	7873	7674	7561
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	42030	42783	43257	43450	43402	43188	42900	42608	42325	42126	42013
Total	115174	134487	162163	182777	182730	182515	182228	163375	133570	112950	112836
Discounted total	115174	128083	147086	157890	150332	143006	135981	116108	90406	72808	69272
Present value cost	1326145										

External Impacts

The municipality is not an isolated institution. The impacts on the municipality will have implications for the wider community, just as those on the wider community will impact on the municipality. Firstly, the economic impact of HIV/AIDS in Walvis Bay may affect the Municipalities revenue.

The revenue of the municipality is generated primarily through the collection of rates and the sale of water and electricity, which collectively account for 80% of revenue.

Rates are an important source of income for the municipality. Ratepayers can be divided into the private sector and households. While there will be a negative impact on the private sector, for most business owners rates are unlikely to be a major cost component in their business operation and their ability to meet this obligation should not be affected by the epidemic.

However, at the household level the impact of the epidemic could affect the ability to pay rates for some households. In addition, as the death rate increases it is likely to cluster in households and create a series of economic shocks over several years for these. These latter households will be increasingly unlikely to be able to pay for services over several months.

The sanitation, sewerage and water services are run on a policy of no profit/ no loss. Therefore, while the performance of the economy and the growth rate of the city may affect the level of demand for these services, this should do little to the financial position of the municipality. This is because any change in revenue should be accompanied by a similar change in expenditure. A similar impact to that relating to rates concerning ability to pay for these services may, however, present itself.

In regard to water service, it should be noted that growth in overall demand would increase less rapidly than in the past as a result of slowed overall population growth. However, in AIDS-affected households, which are caring for the sick and dying, short-term per capita consumption of water will increase, while their ability to pay for this service will decrease.

Electricity provision is, however, different. Electricity is purchased by the council from NamPower and sold at a premium to consumers. The profit generated is used to finance other operations as well as Municipal investments. It is likely that overall electricity sales are related to the performance of the regional economy. Any factor, such as AIDS, depressing the growth of this economy will depress the growth in demand for electricity and therefore the revenue of the municipality. The performance of the city's economy will, therefore, influence the revenue of the council mainly through its impact on electricity demand. Ability to pay for electricity at the household level will also become an issue.

The sale of land and houses is an important source of revenue for the municipality. HIV/AIDS, however, will affect these sales in a number of ways complicating the achievement of delivery targets and interfering with revenue flows. If land or property is purchased from the municipality with no financial ties between the buyer and the municipality existing after the sale there will be little impact as a result of the epidemic. The possible exception being that house and land prices and the health of the market will be affected by HIV/AIDS via the epidemic's impact on the local and regional economy.

If, however, the municipality finances the sale of property or they administer that finance, there will be impacts. A loan agreement involving the municipality in any way means that the council will be involved if the owner dies. If the municipality administers the loan there will be an increase in the costs associated with processing and dealing with that death. In cases where the municipality finances the sale itself than there will be an increase in administrative costs, possible loss of revenue and a decline in profitability.

Administrative costs will increase as deaths increase as changes in the financial arrangements will have to be processed or repossessions conducted. For example, in the case where upon death of the house or plot owner a substitute beneficiary purchaser is identified, the agreements will have to be amended to reflect this change.

In the situation where the sale is prefinanced by the municipality itself there is a risk that the council will lose revenue as payments stop. While many of the agreements include life insurance cover this will become more expensive and as deaths increase this cover will become more difficult to arrange, especially for low income groups.

Even if outstanding debt is covered by an insurance policy, death will decrease the profitability of sales. Sales of property generate revenue in two ways, firstly through the capital payment and secondly through the interest received. Insurance protects the capital, but early payment following a death means the loss of interest income for the remaining years of the loan.

Household Impacts

The other major impact on revenue results from household economic impacts and ability to pay for services. Studies elsewhere in Africa have found that the greatest impact on the household occurs just after death. After the long financial strain of recurring illness, the household is faced with the cost of burial. At this stage households find it difficult to meet other expenses. The impact on municipal revenue resulting from household impacts will largely be determined by two factors: which expenditures the household sacrifices when the financial problems occur and, if these expenditures include payment for services, what the Municipal response will be.

At present, the Municipality provides services to some 10,700 households. It is not possible to determine the number of households likely to be infected or affected by HIV/AIDS. However, the epidemic will not be spread evenly across all households, it will cluster, and because the disease co-varies with educational levels and poverty it will also not be spread evenly throughout all neighbourhoods Walvis Bay.

Further, household's ability to pay for services will be constrained, their willingness to pay for these is unknown. This can only be assessed through household level quantitative surveys, which are beyond the scope of this assessment. However, it may be that households suffering AIDS-related economic shocks may be willing to pay for Municipal services, sacrificing other items in the household budget.

If the household has to reduce or redirect expenditure, but they choose to cut back on other products and services rather than those provided by Walvis Bay Municipality there will be no impact on revenue. If, however, households' stop paying for some or all services provided by the municipality the impact on revenue will be affected by the response of the municipality to this non-payment. If, for example, a household were unable to pay for electricity the typical response would be for the council to warn of disconnection, and then stop provision of the service. This response makes it more difficult for the household to recover from the crisis, as they are now faced with debt and reconnection charges. During the period of disconnection the municipality is making no profit. Alternatively the municipality could offer a reprieve from payments for a short period of time following a death. This would reduce the pressure on the household. Further, it should result in fewer disconnections, reducing these Municipal costs. Once this period has passed the household can resume payments. In the long term this may be more financially beneficial to the household and the Municipality as the profits associated with disconnection are not lost.

In Walvis Bay such an approach may be beneficial given the seasonal nature of employment. If an AIDS death comes at a time when work is not available the household will be placed under great economic and other pressure. If the municipality helps them through this phase, they will be better able to recover and resume payment once work becomes available. In practical terms an alternative policy could take the form of a two-month reprieve following the death of an account holder. Before such a policy could be adopted further investigations into the financial implications would be necessary.

Revenue Growth

The above discussion has focused on the possible impacts of the epidemic on revenue levels. A related and important issue is the impact on revenue growth. All major sources of revenue are related to the size of the city, in terms of area and population. In the demographic section of the previous chapter, the slowing in the rate of population growth was discussed. This slowing in population growth will translate into a reduction in the rate of revenue growth. However, growth in necessary expenditures is also slowed and the net financial position of the municipality should be relatively unaffected.

There is, however, one possible set of financial impacts associated with slower growth. The staff and productive capacity of the municipality has to increase as the city grows. If the rate of increase in staff and productive capacity is based on previous population growth rates for the city than expenditures will increase faster than revenues. To prevent such an occurrence it is essential that planners include the impact of the HIV/AIDS epidemic now, as any increases in capacity, say for electricity provision, involve long term planning. This is particularly important in smaller cities where investments, such as a new sub-station are a significant cost item.

Equally, the demand for burial space and cost associated with its allocation, preparation and maintenance will increase as the death rate climbs and will need to be planned for. How great such an increase will be is difficult to estimate. Many citizens of Walvis Bay are migrants from elsewhere in the country. They may well opt to return home while ill and die outside of the city.

The HIV/AIDS epidemic will impact not only on the revenue of the municipality, but also on the level and pattern of expenditures. Firstly the council is a large employer and is therefore experiencing the associated increasing cost of labour. The magnitude and implications of these increasing costs was discussed earlier in this chapter. Clearly, they will increase the

expenditure of the municipality while no increase in revenue or provision of services is generated.

The above discussion has focused on existing revenue flows and services provided. The HIV/AIDS epidemic poses new problems and the municipality will be called upon to respond to some of these. One such is likely to be changing housing demand. Within ten years there will be 5,000 orphaned children in Walvis Bay. Planning for their housing needs will require the introduction of differing planning designs and standards. The introduction of these and other new services obviously have cost implications.

The Municipal Response

Walvis Bay is the only local authority participating in this Assessment that has a Workplace policy and prevention programmes in place.

The Work Place Programme

The Municipal HIV/AIDS Policy was approved by the City Council and put in place in September 2000. This policy "seeks to minimise and obviate as far as possible the social, economic and developmental consequences of the epidemic to the Municipality and its staff." The plan was developed in line with the National Strategic Plan on HIV/AIDS, and commits the Municipality to provide both the resources and leadership to implement an HIV/AIDS and STD (Sexually Transmitted Disease) programme in the workplace. Equally, the plan ensures the legal and human rights of infected Municipal personnel. It establishes an Employee Assistance Programme (EAP) with an HIV/AIDS component that works under an HIV/AIDS and STD committee responsible for:

- Training personnel to assist
- Communicating the contents of the Policy to all employees, ensuring all informed both verbally and in writing of the programme in place
- Implementing an appropriate HIV/AIDS and STD education and awareness programme in the workplace
- The promotion of non-discriminatory, supportive and sensitive attitudes towards People Living with AIDS (PLWA)
- Information on alcohol and drug abuse and promoting their social rehabilitation
- Information on condom use and other safe sexual practices and the provision of condoms in the workplace
- Information on other precautions needed when attending injured personnel, and the provision of disposable gloves and bleach in the workplace
- Information on the safe handling of medical waste

Responsibility for implementing the programme and ensuring compliance with it rests with all managers within the Municipality.

Staff appears to have welcomed this programme and is taking it seriously and **their** levels of HIV and AIDS literacy are high. Similarly, they believe that HIV/AIDS is a serious problem for the Municipality and Namibia. In the qualitative interviews, personnel demonstrated concern about the negative impact of HIV/AIDS on job quality, on the well being of employees and on the municipal pension fund

A male group said that “although the municipality has just put the Policy in place, people are using the programmes and seeing them as important.” FGD.

All Walvis Bay staff participating in the qualitative interviews could correctly explain HIV and AIDS and how it could be prevented. There was, however, some confusion among staff about transmission of the virus. Participants were asked four questions about the transmission of HIV, and the results are presented in the following table (with the reasons given for incorrect responses):

Table 4.9: Knowledge of HIV/AIDS

Statement	No. of Participants	
	True	False
Question: "If a pregnant woman has the HI virus, her child will inevitably get the HI virus as well."	3	3
Reasons for "true": <ul style="list-style-type: none"> • If the baby comes in contact with the infected blood during birth, the baby can get infected. • One staff member knew someone who was HIV positive and her baby was also. 		
Question: "Kissing someone who has the HI virus can result in HIV infection, as it can be transmitted via saliva."	2	7
Reasons for "true": <ul style="list-style-type: none"> • If both people have sores or cuts in their mouth and one is positive, then HIV can be transmitted. For not sure: <ul style="list-style-type: none"> • Not from saliva but if there is blood contact. 		
Question: "Condoms make the transmission of the HI virus more likely."	0	6
"Someone who is infected with HIV will show clear symptoms, so one can tell who is HIV positive and who is not."	0	13

Municipal personnel (at all band levels) do not deny the existence of the disease, but stigma remains a serious problem. When asked if they knew individuals who had died of AIDS, the responses were mixed. One group of technical staff said that they did not personally know of anyone who had died of AIDS, but stated that: "Sometimes you can see clear symptoms of the disease but do not know the status."

Similarly, two management staff said that they were not sure because "this disease is kept very confidential." Four personnel at lower band levels did know someone who had died of AIDS and others also noted that they had lost one of their colleagues in their division to AIDS. Those that stated that they did not know anyone who had died of AIDS indicated that "family members deny the disease".

Participants were asked to state whether they "agreed" or "disagreed" with eight attitudinal statements and to give reasons for their reply. Findings were as follows:

Table 4.10: Attitudes to HIV/AIDS, Walvis Bay Personnel

Statement	Agree	Disagree
Question: "I don't think that there is anyone in our local authority who has the HI virus."	0	15
Reasons for "disagree": <ul style="list-style-type: none"> The statistics one out of five leads to the conclusion that someone must have the AIDS virus. "Most people don't believe in using condoms." "AIDS is not something that just started so people might be infected." 		
Question: "There is a serious problem of 'sugar daddies' in our community."	12	0
Reasons for "agree": <ul style="list-style-type: none"> These relationships exist to get financial support. These incidences occur with older men who have lots of money. These relationships exist for both black and white people. 		
Question: "If someone is known to have the HI virus, they should be isolated."	0	10
Reasons for "disagree": <ul style="list-style-type: none"> "I disagree, but the community is isolating infected persons." "Isolation is like burying the person alive." 		
Question: "Households that are taking care of an AIDS patient are avoided by other households."	10	0
All participants made it clear that they personally did not agree, they all said that avoidance was happening. Reasons for "agree": <ul style="list-style-type: none"> "People are not educated and are fearing contracting AIDS." Awareness campaigns at first were understood incorrectly and that is why certain households are avoiding other households. 		
Question: "A number of people believe that they can be cleansed of the HI virus if they have sex with a virgin."	11	0
All participants made it clear that they personally did not agree, they all thought others had this idea. Reasons for "agree": <ul style="list-style-type: none"> "This is the reason why so many young children are being raped in our society." (participants from three different groups said this) 		
Question: "If a woman wants to use a condom but the man does not, the man's decision should rule and they should still have sex."	0	5
Reasons for "disagree": <ul style="list-style-type: none"> "This would be like rape." I disagree, but this is the way things are done in our community." 		
Question: "If one is in a long-term relationship, it is impossible to refuse sex, including sex without a condom, even if you fear that they have a sexual infection."	5	0
Reasons for "agree": <ul style="list-style-type: none"> "It is difficult, but not using a condom is also risky. Your husband might be a truck driver or a migrant worker." 		
Question: "If a shopkeeper has the HI virus, I would still buy products from them, including fresh produce."	5	1
Reasons for "disagree": <ul style="list-style-type: none"> One manager said that if the person was preparing fast food with their bare hands, "I might not buy from that shop." 		

All participants supported the workplace programme, although some lower level staff thought that management should demonstrate increased leadership and participation in

"...these programmes are important. People are dying."
Lower Band employee, SWAG.

the programmes. Managers, however, stated that "if we want to survive we must warrant these programmes now". Participants stressed that videos were among the most effective educational tools, as these could be used "to show us the reality of AIDS". Participants stressed the need for consistent and ongoing IEC in the workplace.

Suggested improvements to the Workplace Programme by staff included translations of the materials and videos used into the different Namibian languages so that more staff could understand them, and a more regular and consistent programme of IEC activities, held within working hours.

Interventions

Participants had the following comments on interventions being undertaken by the municipality:

Support Networks

Participants believed that the current peer education intervention is not really supported by the management of the municipality, because they are perceived not to be involved. In addition, it was stated that employees are "sent by force" to attend peer education courses and when they return, they do nothing. Managers usually have excuses not to attend HIV/AIDS meetings or discussion.

Condoms

Female condoms should also be distributed. (The municipality is planning to start a programme where people are advised on how to use the Femidom). They

"Condoms are not the solution to the HIV/AIDS problem, because statistics show that infections are still rising while people use condoms." SWAG Participant, Walvis Bay.

are planning to have Training of Trainers session for the municipality as well as the community in the use of the Femidom. The overall feeling was that the Femidom is important and an aggressive campaign on how to use it should be initiated.

Participants felt that more information should be given on the correct use of condoms. Condom distribution should be at places where one can take a condom without being seen, as some people are shy. Currently the municipality is the main distributor of condoms throughout the town and this includes government line ministries. The overall feeling was that the Femidom is important and an aggressive campaign on how to use it should be initiated.

Awareness Raising

The municipality has an Employment Assistant Programme that shows the rates of HIV/AIDS rates of Walvis Bay, and teaches people about HIV/AIDS. They sometimes invite people who are open about their status for talks, because it is better for people to see people who are infected rather than hear about the disease. The municipality currently has awareness campaigns, as well as the distribution of material on HIV/AIDS matters, newsletters to the wider public on a monthly basis, competitions surrounding health issues, health related videos, and pamphlets which are distributed to the public. Employees are sometimes given pens, rulers and stickers with HIV/AIDS messages written on it.

One respondent emphasised that the ideal awareness campaign would be videos of the suffering of people who have AIDS. It was felt that each department should develop an awareness campaign. Another ideal situation would be if top management openly campaigned about HIV/AIDS.

Financial Support

Financial support interventions should include mechanisms to improve the

“...if the municipality wants to buy a house, then they know how to go about getting finances to purchase the house. The same commitment is needed for HIV/AIDS”. SWAG Participant, Walvis Bay.

financial situation of infected people in order to pay for medical expenses, and assist those who have lost an income earner. This financial assistance should go beyond the existing sick leave, death benefits and pension policies. For example, a municipal credit union should be established to raise capital, establish savings groups or other approaches to assist affected families.

Political Will

Respondents felt that political will was present because of the involvement of governors and councillors in the Regional AIDS committee. All participants felt that it was important for political figure to become more involved in the fight against HIV/AIDS. One participant took it further and said that political figures should test themselves and make their HIV status public in order to motivate and encourage other to do the same. All people, including top management of municipalities should be involved to make such interventions acceptable and effective. Town Mayors especially should become more involved.

"If political leaders talk, then people listen" Participant. Walvis Bay.

Testing, Counselling and Treatment for HIV Positive People

Participants indicated that all three need to be in one package. People should be encouraged to go for testing. If people agree to go for testing then there should be pre-and-post-test counselling. In addition, provision should also be made for loved ones of the infected person to be counselled when the test is positive, throughout the sickness and when the loved one passes away. Another participant proposed that counselling should be carried out by people with the same racial or cultural background as the one seeking counselling. Finally, the municipality should provide treatment for those who are HIV positive and become sick. Currently, the Municipality of Walvis Bay provides pre-and-post test counselling for people who test positive.

Destigmatisation

Interventions to reduce destigmatisation should be open talks, education and guidance. HIV/AIDS positive people should be encouraged and supported to live positively. Government, Churches and NGOs should come together and develop a strategy on how to deal with this. Campaigns should compare cancer with HIV/AIDS, because cancer also had a negative stigma originally. HIV/AIDS positive people should accept themselves so that other can accept them.

Confidence Raising

Some participants indicated that the first step would be for people to know their rights. The municipality should have an open door policy for issues to be discussed. People should feel free to talk to colleagues or managers about this. Negative responses from superiors would undermine confidence raising.

Chapter 5: The Way Forward

Introduction

This final chapter is based on the proceedings of the Strategic Response and Action Planning Workshop held in Walvis Bay from 12 - 16 August 2002, and attended by elected councillors, including mayors, management and other officials from each of the five local authorities. The purpose of the workshop was to assist each municipality develop *draft* multi-sectoral and integrated plans preventing future infections and mitigating the impact of HIV/AIDS on their city or town. The agenda, minutes of proceedings and workshop attendance list is included in Volume 7.

The process involved developing a common understanding and agreement of the impacts of HIV/AIDS on the five cities, agreeing a strategic response and, finally, participants from each local authority began developing plans to prevent and mitigate the epidemic in their own city. It should be noted that the plans developed for each local authority are drafts, and will require consolidation and expansion, prior to their submission through senior management to Council for approval.

The Planning Process

The planning process involved:

- reviewing the draft Impact Assessment reports (including ensuring their accuracy, and recommending suggested changes);
- developing a common understanding and agreement of the impacts of HIV/AIDS on the five cities;
- agreeing the elements of a strategic response;
- identifying the data and information needs in order to inform this response; and
- developing draft plans to prevent and mitigate the impacts of the epidemic in their own city.

It should be noted that the plans developed for each local authority are *drafts*, and will require consolidation and expansion, prior to their submission through senior management to the respective Municipal or Town Council for approval.

Strategic Response

Participants agreed that an appropriate strategic response by each local authority would encompass the three areas discussed below.

Management Strategies

These are to assist the local authority identify, plan for and monitor the impacts of the epidemic on its personnel and operations.

Internal Strategies

Internal strategies are intended to enhance knowledge and understanding of HIV and AIDS among municipal employees and reduce future infections through prevention activities built on this knowledge. They are centred around the development, approval and implementation of Workplace Policies and Programmes

External Strategies

The external environment refers to the impacts of HIV/AIDS on the community served by Walvis Bay Municipality. The intention of these strategies is to widen the municipal response to the epidemic through enhanced linkage with and support to existing government and non governmental organisation programmes and activities.

Based on these three strategies, the participants from Walvis Bay then developed the following goal to guide and inform the town's strategic response to the epidemic:

GOAL: To reduce the incidence rate of HIV through all possible preventive measures and to minimise and obviate as far as possible the social, economic and development consequences of the epidemic in Walvis Bay

Data Needs

Detailed lists of the information and data required to plan for the epidemic's impacts and to inform prevention activities were discussed and developed at the Workshop. These included:

- data needed to inform management responses to the impact of the epidemic, for example those relating to absenteeism, personnel profiles, critical posts, etc.
- data needed to measure and monitor the epidemic's impact on the city such as that relating to its economic performance, municipal revenue, etc.
- data needed to expand the municipal prevention response both internally and externally. This included Knowledge, Attitudes and Practices studies data on other providers of prevention and support services among the wider community, for example.

Data sources for this information were discussed, and a detailed list of these is contained in the minutes of the Workshop proceedings. However, in this regard, the importance of collecting adequate data within local authorities should not be under-estimated. This is particularly pertinent in regard to the human resource management systems presently in place within each local authority. While most are able to the basic data needed to monitor the epidemic's impacts on personnel (i.e., that relating to absenteeism), with the exception of Swakopmund, none are disaggregating leave by type and none are costing these absences. These need to be monitored on a monthly basis.

Equally, no municipality is monitoring the impact and cost of AIDS related illness and death on benefit programmes and their costs. These need to be monitored annually.

Action Plans

Each municipality then developed its own plan covering the three elements of the agreed strategic response. Each strategy area has several objectives, and for each of these a detailed

list of activities was developed, the person or persons responsible for the activity were designated, the time frame established, outputs identified and budgets estimated. The detailed draft plans developed for Walvis Bay are contained in Annex B to this report.

The Way Forward

Following the workshop, deadlines were set for the receipt of additional comments of the draft and will lead completion of the final report. At this stage the Assessment of the Impact of HIV/AIDS on Walvis Bay is to be presented to Council for approval and action. However, the draft plans included in the final report will require further elaboration and, perhaps, amendment, by Council officers prior to their presentation to management and subsequently to Council for agreement and approval.

However, Family Health International (FHI), through whom the funds for this Assessment have been provided, has agreed that the remaining, *limited*, funds under the SIAPAC contract may be re-programmed. The intention is to support activities related to the acceptance, initiation and implementation of findings and recommendations (as contained in the plans) resulting from this Assessment by the local authorities. Requests for the use of these funds are to be made in writing to FHI through SIAPAC for approval. The types of activities suggested for the use of the remaining funds are further workshops presenting the findings from the Assessment and the draft plans to senior managers and Councils at the local level, additional data gathering exercises to supplement findings from the report or further planning exercises, etc.

Beyond these activities, additional strengths and resources are to be found within the network of local authorities in Namibia, through the national associations (NALAO and ALAN). Equally, AMICAAL can assist in developing and implementing the plans to mitigate the impacts of HIV/AIDS on each municipality. However, it is the responsibility of the appropriate representatives within each local authority to present the findings of the reports and the plans to mitigate the impacts of HV/AIDS to these national associations as well as other bodies.

Annex A: Active HIV/AIDS Organisations

The following Aids Support Organisations indicate that they provide service in Walvis Bay and/or in the Erongo Region.

Name of Organisation: AIDS Law Unit (LAC)

Programmes

- Litigation and legal advice,
- Lobbying and Advocacy
- Policy Formulation,
- Development of Training and Educational materials

Name of Organisation: “Aitsama Huisen” Students’ Empowerment and development trust (SEDT)

Programmes

- HIV/AIDS awareness creation,
- Provide infrastructure that would practically expose students’ to entrepreneurship,
- Facilitate exposure visits of HIV/AIDS people to schools
- Raising business awareness and host market days,
- Intensify the HIV/AIDS prevention campaign

Name of Organisation: Alliance of Mayors and Municipal leaders on HIV/AIDS in Africa (AMICAALL)

Programmes

- The programme aims to strengthen capacity to reduce the social and economic impact of HIV/AIDS on urban and peri-urban centres, with particular focus on heavily affected countries in sub-Saharan Africa by supporting the development of local government/civil society partnerships; creating capacity for scaling up multi sectoral responses; sharing knowledge and lessons about what works across countries contributing to the development of a supportive policy environment that reflects the rights of those affected and is gender sensitive; stimulating twinning and other partnerships to enhance solidarity across borders; and promoting innovative approaches to resource mobilisation for community based initiatives.

AMICAAL is the strategy adopted by the Alliance to translate its goals into concrete options in countries and communities. The overall goals of AMICAAL are to develop and implement multi-sectoral responses to the HIV/AIDS epidemic at the local level via a consultative process between Civil Society and Community leaders and achieve local capacity. It calls for a locally fed, multi-sectoral approach that complements and supports national policies.

Name of Organisation: Catholic AIDS Action (CAA)

Programmes

- Implement a modified programme for Primary schools – Stepping Stones,
- Motivate and implement youth-prevention oriented programmes such drama groups, peer-support and establish Anti AIDS Clubs in Roman Catholic affiliated parishes and schools,
- Recruit and train volunteers for spiritual support, counselling, home-visits, caring and supporting sick ones and orphaned children,
- Ensure a demonstrated commitment to HIV/AIDS awareness and prevention through periodic sermons, distribution of literature and group meetings.
- Offer support for local self-help Groups and activities,
- Soup kitchens for HIV/AIDS patients, orphans and vulnerable children,
- Initiatives in living positively and caring for ourselves in order to care for others,
- Income generating activities and limited direct (welfare) support,
- Undertake community education and outreach programmes,
- Implement annual Training of Trainers (ToT) programmes in Home Based Care and Physio-social supports,
- Host annual Conferences (both at national and regional level).

Name of Organisation: Change of lifestyle Home's Project (C. O. L. S)

Programmes

- Safe house for juvenile offenders,
- Education programme
- Health Unit (HIV/AIDS)
- 4H Project (Youth Entrepreneurial Programme)
- Youth Development Programme.

Name of Organisation: Chief Hosea Kutako Foundation AIDS Desk (CHKFAD)

Programmes

- To promote a sense of solidarity, self-discipline and practical cooperation among the youth for a genuine action,
- Promote primary health care as a first line defence against diseases with emphasis on AIDS, TB and avoidance of diet
- Organize educative meetings, seminars workshops and conferences in various communities on matters pertaining to poverty alleviation as well HIV/AIDS.

Name of Organisation: Council of Churches in Namibia (CCN)

Programmes

- Conduct faith justice and society programmes
- HIV/AIDS educational campaign,
- Conduct Violence against Women and Children Workshop,
- Operational Voluntary testing Centre, with cost involved
- Marriage counselling

Name of Organisation: ELCRN AIDS Programme

Programmes

- Home Base Care/Psycho-Social,
- Support to OVC/Counselling Services,
- Training of Trainees,
- Peer Education Training,
- Stepping Stones Programme,
- Pastors in Sexual Education and Counselling,
- Awareness Raising: Developing IEC materials etc.

Name of Organisation: Kasoyetua Youth Group of Namibia

Programmes

- House to house consultation,
- AIDS Awareness campaign and condom distribution in rural areas,
- Poem presentation and drama performance on HIV/AIDS with the intention of raising public awareness with regard to HIV/AIDS,
- Sensitisation Workshops on HIV/AIDS,
- Conduct Life Skills Educational Programmes in rural areas targeting youth aged 14-20 at secondary level.

Name of Organisation: Namibia Men Planned Parenthood Network (NAMPPAN)

Programmes

- Provide first hand information on counselling support services for men infected and affected with HIV/AIDS,
- Facilitate a comprehensive educational workshops on human rights and democracy, gender equality as partners in society and private live between men and women,
- Raise public awareness on family planning, HIV/AIDS prevention and domestic violence,
- Develop and promote user-friendly information, education and communication materials on male Reproductive Health support information and service at work place,
- Promote public debates on the role of men and women in society.

Name of Organisation: Namibia National Network for people living with HIV/AIDS
(NNNP+/LIRONGA EPARU)

Programmes

- Mitigate for the rights of PLWHA,
- Provision of information, education and communication (IEC) materials on HIV/AIDS,
- Administer Bursary Fund for PLWHA – long term object of the Network,
- Provide Counselling and Home Based Care to people living and affected by HIV/AIDS and if need be refer to suitable Counsellors,
- Offer Empowerment, self-reliance, self confidence and motivational training courses for PLWHA,
- Advocate for access to treatment, care and support for PLWHA,
- Undertake annual regional visits to selected regions in order to build the capacity of regional structures,
- Advocate to policy makers and politicians on matters of different impact to PLWHA, such the introduction of PTCT programme – (parental-to-child-transmission),
- Income generating projects to support orphans and for self-sustainable.

Name of Organisation: Namibia Planned Parenthood Association (NAPPA)

Programmes

- Condom distribution,
- Information dissemination pertaining to sexual and reproductive health,
- Educational provision on family planning,
- Development of IEC material for public use,

- Implementing a 5-year UNFPA funded project to provide SRH information and Service to youths in-and-out of school in the Ohangwena Region,
- Establishment of Youth Clubs in schools.

Name of Organisation: Namibia Students' Education Movement (NASEM)

Programmes

- Fostering pf parents', students and teachers co-operation amongst various educational institutions,
- Advocate for abstinence as the best option of alternatively condom use and adherence to moral values and social ethics,
- Conduct various students' rights and obligations workshops,
- Leadership capacity building workshop for Learners and Students' Representative Council,
- Career guidance and motivational workshops for learners,
- Crisis intervention and mediation at school level,
- Participation in policy formulation with relevant stakeholders with emphasis on education and affecting the youth and the entire nation at large.

Name of Organisation: NaSoMa

Programmes

- Development of Behaviour Change Communication (CBC) materials as part of HIV/ AIDS prevention approach,
- Offer training on the correct usage and consistent of both the male and female condoms,
- Build an infrastructure for implementing a Namibian managed social marketing programmes,
- Set up a countrywide distribution and sales network for male and female condoms,
- Promote and market both the male and female condoms ensuring that products are always available, affordable and easily accessible to everybody.

Name of Organisation: National Union of Namibia Workers (NUNW)

Programmes

- Collective bargaining activities,
- Dispute negotiation, resolution, mediation and prevention,
- Arbitration.

Name of Organisation: Peer Education and Counselling Project (PECP)

Programmes

- Face to face counselling,
- Helpline telephone counselling,
- Training of Community AIDS Educators and Counsellors,
- Establish Regional Community HIV/AIDS Committee select and train HIV/AIDS Community Educators,
- Condom distribution at strategic places in and around Windhoek.

Name of Organisation: Sister Namibia

Programmes

- Conduct research on the socio-cultural constructions of masculinities, feminities and sexualities as a basis for developing pilot materials for comprehensive sexuality education in Namibia,
- Advocate and lobbies for full representation and participation of women in politics and governance,
- Provide training to women in rural and marginalized urban communities on the Convention for the Elimination of All Forms of Discrimination Against Women (CEDAW) and women's rights,
- Conduct discussion events on topical issues of concern to women,
- Collect and hosts regional and international materials on women and gender issues

Name of Organisation: Social Marketing Association (SMA)

Programmes

- Social marketing of maximum gold condoms and bednets,
- Promotional activities for condoms,
- Design drama and educational spots for the Rukwangali and Silozi radio services,
- Provision of high quality and affordable treated bednets to the residence of North Eastern Regions of Namibia and Walvis Bay,
- Facilitate ongoing education on HIV/AIDS in the north-eastern regions of Namibia.

Name of Organisation: Soli Deo Gloria HIV/AIDS Awareness Club

Programmes

- Visits to hospitals, old age homes and regional branches to offer voluntary social work promoting a culture of Christianity,
- HIV/AIDS awareness campaign through drama, musical performance and debates with focus in rural areas,
- Offer specialized musical training classes/courses,
- Facilitate Training of Trainers from selected regions.

Name of Organisation: True Love Waits (TLW)

Programmes

- Advocate for minimal teenage pregnancies and early parenthood,
- HIV/AIDS Information dissemination to the public meetings, school visits, shebeens and at squatter areas,
- Peer education and counselling,
- Regular radio talks in at least three indigenous languages,
- Encourage young people to opt for abstinence until marriage,
- Conduct radio talks,
- House to house visits to educate the public on the transmission of HIV/AIDS as well as the prevention methods thereof.

Name of Organisation: Woman Solidarity

Programmes

- Offer talks, workshops and seminars to secondary schools students' with emphasis on violence against women,
- Telephonic and face to face counselling,
- Carry outreach programmes in a form of workshops and educational talks at schools and work place in order to raise public awareness thus ultimately reducing violence resultant HIV/AIDS infections,
- Offers support to women who were abused, sexually, physically or emotionally,
- Crisis intervention through a third-party,
- Advocacy and lobbying, networking and research into woman abuse and rape.

Name of Organisation: Young Women Christian Association of Namibia (YWCA)

Programmes

- Offer Peer Counselling,
- Conducts HIV/AIDS drama performance,
- Run and manage needlework classes,
- Provide counselling to teenage mothers,
- Provide Pre-and primary education,
- Conducts literacy programmes, Income generating projects (vegetable garden)

**Annex B:
HIV/AIDS
Prevention,
Response and
Action Plans**

WALVIS BAY: MANAGEMENT STRATEGIES

STRATEGY AREA: Data Collection and Analysis								
OBJECTIVE: To collect, analyse and utilise data to inform the Municipality's HIV/AIDS response								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Use the existing Task Force to agree on a) minimum internal data required, and b) minimum external data required	HIV/ AIDS Task Force	MHSS, Path Care, District Aids Committee	Nov. 02	Inventory List	Nil	Nil	Nil
2	Identify relevant personnel responsible for compilation of required data	HIV/ AIDS Task Force	None	Oct. 02	Inventory of Responsible Personnel	Nil	Nil	Nil
3	Train Personnel in data collection, if required	HIV/ AIDS Task Force	None	Nov. 02	Submit list of trained personnel	Nil	Nil	Nil
4	Compile a directive/framework for the collection/evaluation of data	Trained officials	None	June, 03	Annual Report	Nil	Nil	Nil

WALVIS BAY: MANAGEMENT STRATEGIES

STRATEGY AREA: Baseline and Periodic Assessment								
OBJECTIVE: To generate a picture of the epidemic currently and in the future								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Establish a working group to assess the HIV/AIDS Impact Report (SIAPAC)	Management	None	Aug. 02 - Sept. 02	Compile a summarised report to present a picture of the epidemic	Nil	Nil	Nil
2	Convene a meeting with key external stakeholders as appropriate to collect and analyse relevant information	HIV/ AIDS Task Force	MHSS Path Care District Aids Committee	June, 03	Quarterly Report	Nil	Nil	Nil
3	Review risk profile and impact assessment annually and submit an Annual Report	—	—	June, 03	Annual HIV AIDS Report	Nil	Nil	—

WALVIS BAY: MANAGEMENT STRATEGIES

STRATEGY AREA: Structure and Planning								
OBJECTIVE: To establish and mandate structures to plan, implement and monitor the city's HIV/AIDS response								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Establish HIV/AIDS Committee	Co-ordinator	None	Jan. 02	Compile a List of Committee Members	Nil	Nil	Nil
2	Compile short term Strategic Plan in accordance with statutory and legal obligations	HIV/AIDS Committee	All Departments	Feb. 03	Completed document	Nil	Nil	Nil
3	Approval of Strategic Plan by Council	Council	None	March 03	Council Resolution	Nil	Nil	Nil
4	Identify critical posts and introduce skills succession planning	H.R.	All departments	June, 03	Skills succession plan	Nil	Nil	Nil

WALVIS BAY: MANAGEMENT STRATEGIES

STRATEGY AREA: Leadership								
OBJECTIVE: To demonstrate leadership support and commitment in respect of HIV/AIDS								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Ensure approval of HIV/AIDS Policy and shorter term Strategic Plan by Council	HIV/AIDS Committee	None	March, 03	Approved documents	Nil	Nil	Nil
2	Communication of HIV/AIDS Policy and Strategic Plan with Impact Assessment Report by Councillors and Executive Management	Councillors and Executive Management	None	June, 03	Meeting/s held with community	Nil	Nil	Nil

WALVIS BAY: INTERNAL WORKPLACE PROGRAMME

STRATEGY AREA: Workplace programme								
OBJECTIVE: To develop, adopt and implement a comprehensive HIV/AIDS workplace programme								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Develop HIV/AIDS and STD policies in line with national HIV/AIDS Policy and statutory requirements	H.R.	Consultants if required	Nov. 01	Policy Approved	Nil	Nil	Nil
2	Compiled and approved workplace programme in accordance with the requirements of the approved HIV/AIDS Policy	HIV/AIDS Committee	General Managers	Feb. 03	Approved Workplace Programme	Nil	Nil	Nil
3	Develop and approve alcohol and illegal substance abuse policy	H.R.	General Managers	Feb. 03	Approved alcohol and illegal substance abuse policy	Nil	Nil	Nil
4	Communicate above policies to all employees	HIV/AIDS Committee	Peer educators and counselors	March 03	Meetings conducted	Nil	Nil	Nil

5	Implement policies and programmes after approval by Council	HIV/AIDS	Peer Educators and Counselors	April 03	Feedback reports	Nil	Nil	Nil
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WALVIS BAY: INTERNAL WORKPLACE PROGRAMME

STRATEGY AREA: Training Programme								
OBJECTIVE: To establish a cadre of appropriately trained and supported staff								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Identify competent staff to be trained as peer educators and counselors	HIV/AIDS Committee	General Managers	Sept. 02	List of nominated staff	Nil	Nil	Nil
2	Arrange the necessary training for per educators and HIV/AIDS counselors	HIV/AIDS Committee	OHEAP Consultant	Oct. 02	Presentation of certificates	N\$8,000	Municipality	Consultant
3	Training of trainers programme	Environmental Health Officer	—	Oct. 02	Presentation of diplomas	Nil	Nil	Nil

WALVIS BAY: INTERNAL WORKPLACE PROGRAMME

STRATEGY AREA: Programme for Infected and Affected Staff								
OBJECTIVE: To create an enabling environment and provide appropriate treatment, care and support for infected and affected staff								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Ensure availability of voluntary testing and counseling services	HIV/AIDS Committee	MOHSS, Private clinics, doctors	Sept. 02	Voluntary testing and counseling statistics	Nil	Nil	Nil
2	Develop and promote comprehensive IEC materials	HIV/AIDS Committee	District AIDS Committee, NGOs, MOHSS	Sept. 02	Material available (e.g., videos)	N\$10,000	Nil	Nil
3	Create continuous dialogue through peer educators and HIV/AIDS counselors	HIV/AIDS Counselors and peer educators	All other stakeholders as identified	Oct. 02	Counseling statistics	Nil	Nil	Nil
4	Search for appropriate work environment for infected persons	H.R.	General Managers	Oct. 02	H.R. Statistics	Nil	Nil	Nil

WALVIS BAY: EXTERNAL PROGRAMME

STRATEGY AREA: Participation in Local Government Fora								
OBJECTIVE: To ensure effective networking around HIV/AIDS and optimal sharing of experience								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Liaise with relevant bodies, e.g., NALAO Advisory Committee, Impact Assessment, AMICALL and provide feedback to internal stakeholders	C.E.O.	None	Quarterly	Feedback report	—	—	—
2	Submit regular HIV/AIDS progress reports to AMICALL	C.E.O.	None	Annually	HIV/AIDS Progress Report	—	—	—
3	Liaise and network with other municipalities, towns and villages	HIV/AIDS Committee	None	Annually	Reports	N\$5,000	—	—

WALVIS BAY: EXTERNAL PROGRAMME

STRATEGY AREA: Baseline and Periodic Assessment								
OBJECTIVE: To collect, analyse and utilise information to inform and support the city's external HIV/AIDS programme								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Review and update current list of all potential stakeholders and available resources	HIV/AIDS Committee	All stakeholders on attached list	Jan. 03	New updated and expanded list of stakeholders	—	—	—
2	Disseminate updated list to all internal and external stakeholders	HIV/AIDS Committee	All stakeholders on attached list	Feb. 03	Updated list distributed	—	—	—

WALVIS BAY: EXTERNAL PROGRAMME

STRATEGY AREA: Participation in community HIV/AIDS responses								
OBJECTIVE: To join, participate, support and enrich community HIV/AIDS responses								
INDICATOR:								
No.	Activities	Responsible Person Lead unit	Other Partners	Time frame	Output	Budget	Fund- ing Source	Technical Assistance
1	Establish a multi-sectoral IEC Committee	HIV/AIDS Committee	All Stakeholders on list	April 03	IEC Committee	—	—	—
2	Development of training materials, manuals, visual aids, etc	IEC Committee	All Stakeholders on list	May, 03	Training materials, manuals, visual aids, etc.	N\$20,000	—	—
3	Conduct monthly meetings to perform, assess and evaluate programmes	IEC Committee	All Stakeholders on list	May, 03 and ongoing	Reports, minutes	—	—	—
4	Facilitate continuous dialogue/awareness campaigns, seminars with community	IEC Committee	All Stakeholders on list	June 03 and ongoing	—	—	—	—

5	Submit motivation for a full-time municipal HIV/AIDS co-ordinator response for external communication, etc.	Task Force	All Stakeholders on list	July, 03	—	—	—	—
6	Conduct fund raising programmes	Office of the Mayor	—	July, 03	—	—	—	—

Annex C: Cost Assumptions

ESTIMATING THE COST OF HIV/AIDS IN Windhoek Municipality

This simple model is divided into a number of sheets.

The first is this introduction,

The 'Total' sheet presents the total cost of HIV across all job bands/grades

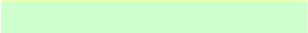
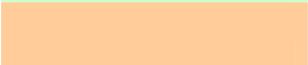
The 'Result' sheets present results for each band

The 'Á&D' sheets contain the data for each band on which the costings are based

The 'Notes' sheets explain the headings in the 'Results' and 'Á&D' sheets

The 'Limitations' sheet outlines the problems with the model

This model is colour coded:

	Cells containing headings
	Cells which require data
	Calculated output, do not enter data

This model is extremely simplified, this was necessary due to the lack of human resource data available.

It is not intended to provide an accurate estimate of cost, but rather to provide an idea of the order of magnitude

It can also be used as a planning tool to identify major costs and implications of different situations

NOTES

Deaths	Total number of employee deaths from AIDS in current year
Sick leave	
Days	Total number of days sick leave taken as a result of HIV infection in current year
Cost	Cost of sick leave: calculated as number of days*average cash salary
Compassionate leave cols	Cost of compassionate leave taken as a result of the death of colleagues
Productivity	The cost of lower productivity resulting from HIV infection
Recruitment	The cost of recruiting replacement staff for those who have died from AIDS that year
Training	The cost of training replacement staff for those who have died from AIDS that year
Sub total	
Pension fund increase	The cost of increased pension fund contributions necessary to cover increased death benefits
Compassionate leave family	Cost of compassionate leave taken as a result of the death of family members
Housing	The amount of bad debt resulting from outstanding housing loans which the life insurance has refused to cover
Sub total	
Total	
Discounted total	The present value of future costs 2002-2010

Notes

Sick leave in service	The average number of days sick leave taken, per year, up to and including the year of death for employees who die in service
Sick leave retirement	The average number of days sick leave taken, per year, up to and including the year of death for employees who die after retiring of service
Productivity loss	The proportion by which productivity is reduced as a result of HIV infection up to and including the year of death
Productivity days	The number of days work which the lost productivity is equivalent to
Productivity days cost (in service)	The cost of the work day equivalent lost for those who die in service
Productivity days cost (retirement)	The cost of the work day equivalent lost for those who die after retiring from service
Cost per day	The average cost of a lost day of work
Number of working days	Total number of working days per year per employee
Training	The average cost of training a replacement employee
Recruitment	The average cost of recruiting a replacement employee
Average outstanding debt (housing)	The average amount outstanding on an employees housing loan at the time of an AIDS related death
Proportion of life insurance refused	The proportion of life insurance pay outs, resulting from an AIDS death, which are refused on the grounds of an AIDS exclusion
In service deaths	The proportion of AIDS deaths which occur while the employee is still in service
Retirement deaths	The proportion of AIDS deaths which occur after the employee has retired from service
Premature years	The average number of years employees who die of AIDS would have remained at work
Compassionate leave family	The average (across the entire work force not just those who have lost a family member) number of days taken as compassionate leave for a family members death resulting from AIDS
Compassionate leave cols	The average (across the entire work force) number of days taken as compassionate leave for a Colleagues death resulting from AIDS
Staff growth rate	The rate at which the work force is expected to grow each year
Pension fund increase	The percentage increase in pension fund contributions, as a percentage of the salary bill, necessary to cover the cost of increased AIDS deaths
Total staff	Total staffing complement in 2002
Discount rate	The government discount rate

Limitations

The model is limited in a number of ways

Firstly, many of the complicated calculations are exogenous inputs to the model: deaths from AIDS, pension fund increases etc

Secondly, costs are not distributed throughout the year, the discounted amount assumes that they all happen at once

This is not a major concern as it makes little difference to the final result

Thirdly, the model takes little consideration of the difference in costs associated with different levels of employment and differences in age

The work force should be disaggregated by age, and job band and the model run for each.

This was not possible given the limitations of the data.

Finally, the model is limited, as is any model, in that it is only as good as the data which is entered into it.

RESULTS ALL BANDS

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	11	12	15	17	18	18	18	18	18	15	14
Sick leave											
Days	820	953	1075	1143	1155	1155	1155	1125	1022	910	827
Cost	160316	188559	221342	240331	241956	241956	241956	231676	197948	168508	156635
Compassionate leave cols	4360	4620	5776	7308	7568	7568	7568	7568	7568	5512	5140
Productivity	100416	129934	150350	159793	160956	160956	160956	141200	116651	103749	96911
Recruitment	3427	3739	4673	5296	5608	5608	5608	5608	5608	4673	4362
Training	7477	7789	9970	12774	13085	13085	13085	13085	13085	9347	8412
Sub total	275996	334640	392111	425502	429174	429174	429174	399138	340861	291789	271459
Benefit increase	91595	91595	91595	91595	91595	91595	91595	91595	91595	91595	91595
Compassionate leave family	20146	22149	23408	23921	23795	23225	22459	21683	20930	20402	20101
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	111741	113744	115003	115516	115390	114820	114054	113278	112525	111996	111696
Total	387738	448385	507115	541018	544563	543993	543228	512415	453385	403786	383155
Discounted total	387738	427033	459968	467352	448014	426233	405365	364164	306869	260284	235224
Present value cost	4188242										

ASSUMPTIONS AND DATA Band A1

	1	2	3	4	5	6	7	Death			
Sick leave in service	4	0	0	0	0	0	21	41			
Sick leave retirement	4	0	0	0	0	20	41	0			
Productivity loss	0	0	0	0	0	0	0.1	0.1			
Productivity days	0	0	0	0	0	0	19.9	17.9			
Productivity days cost (in service)	0	0	0	0	0	0	2587	2327			
Productivity days cost (retirement)	0	0	0	0	0	0	2587	0			
Cost per day	130										
Number of working days	220	Discounted	Net								
Training	500	188.4447414	311.55526								
Recruitment	500	188.4447414	311.55526								
Average outstanding debt	0										
Proportion not covered	0.1										
In service deaths	0.5										
Retirement deaths	0.5										
Premature years	20										
Compassionate leave family	2										
Compassionate leave cols	2										
Staff growth rate	0										
Benefit increase	0.003										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total staff	312	312	312	312	312	312	312	312	312	312	312
Excess mortality	0.0145169	0.015960134	0.0168673	0.0172366	0.0171458	0.016734952	0.0161835	0.0156239	0.0150814	0.0147007	0.0144839
No. close family	5										
Discount rate	0.05										

Total Increased Costs Resulting from the Epidemic on Band A1

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	7	8	10	10	11	11	11	11	11	10	10
Sick leave											
Days	536	618	665	696	709	709	709	699	668	627	565
Cost	69615	80340	86450	90480	92105	92105	92105	90805	86775	81510	73450
Compassionate leave cols	1820	2080	2600	2600	2860	2860	2860	2860	2860	2600	2600
Productivity	28841	35178	37505	40092	41256	41256	41256	41256	38669	37505	32331
Recruitment	2181	2492	3116	3116	3427	3427	3427	3427	3427	3116	3116
Training	2181	2492	3116	3116	3427	3427	3427	3427	3427	3116	3116
Sub total	104637	122583	132786	139403	143075	143075	143075	141775	135158	127846	114612
Benefit increase	26770	26770	26770	26770	26770	26770	26770	26770	26770	26770	26770
Compassionate leave family	5888	6473	6841	6991	6954	6788	6564	6337	6117	5963	5875
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	32658	33243	33611	33761	33724	33557	33334	33107	32887	32732	32644
Total	137295	155826	166397	173164	176799	176632	176408	174881	168044	160578	147256
Discounted total	137295	148406	150927	149585	145453	138396	131639	124285	113739	103510	90403
Present value cost	1433637										

ASSUMPTIONS AND DATA FOR BAND A2/3

	1	2	3	4	5	6	7	Death			
Sick leave in service	4	0	0	0	0	0	21	41			
Sick leave retirement	4	0	0	0	0	20	41	0			
Productivity loss	0	0	0	0	0	0.1	0.1	0.1			
Productivity days	0	0	0	0	0	22	19.9	17.9			
Productivity days cost (in service)	0	0	0	0	0	4092	3701.4	3329.4			
Productivity days cost (retirement)	0	0	0	0	0	4092	3701.4	0			
Cost per day	186										
Number of working days	220	Discounted	Net								
Training	1500	565.3342243	934.66578								
Recruitment	500	188.4447414	311.55526								
Average outstanding debt	0										
Proportion not covered	0.1										
In service deaths	0.5										
Retirement deaths	0.5										
Premature years	20										
Compassionate leave family	2										
Compassionate leave cols	2										
Staff growth rate	0										
Benefit increase	0.003										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total staff	85	85	85	85	85	85	85	85	85	85	85
Excess mortality	0.0145169	0.015960134	0.0168673	0.0172366	0.0171458	0.016734952	0.0161835	0.0156239	0.0150814	0.0147007	0.0144839
No. close family	5										
Discount rate	0.05										

Total Increased Costs Resulting from the Epidemic on Band A2/3

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	2	2	2	3	3	3	3	3	3	3	2
Sick leave											
Days	135	145	176	193	193	193	193	193	183	152	131
Cost	25110	26970	32736	35805	35805	35805	35805	35805	33945	28179	24366
Compassionate leave cols	744	744	744	1116	1116	1116	1116	1116	1116	1116	744
Productivity	18916	23008	26710	28374	28374	28374	28374	28374	24282	20581	18916
Recruitment	623	623	623	935	935	935	935	935	935	935	623
Training	1869	1869	1869	2804	2804	2804	2804	2804	2804	2804	1869
Sub total	47263	53215	62682	69034	69034	69034	69034	69034	63082	53615	46519
Benefit increase	10435	10435	10435	10435	10435	10435	10435	10435	10435	10435	10435
Compassionate leave family	2295	2523	2667	2725	2711	2646	2559	2470	2384	2324	2290
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	465	12958	13101	13160	13145	13080	12993	12905	12819	12759	12725
Total	59992	66173	75783	82194	82179	82114	82027	81939	75901	66373	59243
Discounted total	59992	63021	68738	71002	67609	64339	61210	58232	51373	42785	36370
Present value cost	644671										

ASSUMPTIONS AND DATA FOR BAND

B

	1	2	3	4	5	6	7	Death				
Sick leave in service	4	0	0	0	0	0	21	41				
Sick leave retirement	4	0	0	0	0	20	41	0				
Productivity loss	0	0	0	0	0	0.1	0.1	0.1				
Productivity days	0	0	0	0	0	22	19.9	17.9				
Productivity days cost (in service)	0	0	0	0	0	6996	6328.2	5692.2				
Productivity days cost (retirement)	0	0	0	0	0	6996	6328.2	0				
Cost per day	318											
Number of working days	220	Discounted	Net									
Training	2500	942.2237072	1557.7763									
Recruitment	1700	640.7121209	1059.2879									
Average outstanding debt	0											
Proportion not covered	0.1											
In service deaths	0.5											
Retirement deaths	0.5											
Premature years	20											
Compassionate leave family	2											
Compassionate leave cols	2											
Staff growth rate	0											
Benefit increase	0.003											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Total staff	95	95	95	95	95	95	95	95	95	95	95	
Excess mortality	0.0145169	0.015960134	0.0168673	0.0172366	0.0171458	0.016734952	0.0161835	0.0156239	0.0150814	0.0147007	0.0144839	
No. close family	5											
Discount rate	0.05											

Total Increased Costs Resulting from the Epidemic on Band B

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	1	1	2	2	2	2	2	2	2	1	1
Sick leave											
Days	80	111	127	127	127	127	127	117	86	66	66
Cost	25281	35139	40386	40386	40386	40386	40386	37206	27348	20829	20829
Compassionate leave cols	636	636	1272	1272	1272	1272	1272	1272	1272	636	636
Productivity	23166	29495	32341	32341	32341	32341	32341	25345	19016	16170	16170
Recruitment	312	312	623	623	623	623	623	623	623	312	312
Training	1558	1558	3116	3116	3116	3116	3116	3116	3116	1558	1558
Sub total	50953	67139	77737	77737	77737	77737	77737	67561	51375	39505	39505
Benefit increase	19939	19939	19939	19939	19939	19939	19939	19939	19939	19939	19939
Compassionate leave family	4386	4822	5096	5207	5180	5056	4889	4720	4556	4441	4376
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	24324	24760	25034	25146	25118	24994	24828	24659	24495	24380	24314
Total	75277	91899	102771	102883	102856	102731	102565	92220	75870	63884	63819
Discounted total	75277	87523	93217	88874	84620	80493	76536	65539	51352	41180	39179
Present value cost	783789										

ASSUMPTIONS AND DATA FOR BAND C-F

	1	2	3	4	5	6	7	Death			
Sick leave in service	4	0	0	0	0	0	21	41			
Sick leave retirement	4	0	0	0	0	20	41	0			
Productivity loss	0	0	0	0	0	0.1	0.1	0.1			
Productivity days	0	0	0	0	0	22	19.9	17.9			
Productivity days cost (in service)	0	0	0	0	0	12760	11542	10382			
Productivity days cost (retirement)	0	0	0	0	0	12760	11542	0			
Cost per day	580										
Number of working days	220	Discounted	Net								
Training	3000	1130.6684	1869.332								
Recruitment	2000	753.77897	1246.221								
Average outstanding debt	0										
Proportion not covered	0.1										
In service deaths	0.5										
Retirement deaths	0.5										
Premature years	20										
Compassionate leave family	2										
Compassionate leave cols	2										
Staff growth rate	0										
Benefit increase	0.003										
Total staff	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
	90	90	90	90	90	90	90	90	90	90	90
Excess mortality	0.014517	0.0159601	0.016867	0.017237	0.017146	0.01673495	0.016184	0.015624	0.015081	0.014701	0.014484
No. close family	5										
Discount rate	0.05										

Total Increased Costs Resulting from the Epidemic on Band C-F

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths	1	1	1	2	2	2	2	2	2	1	1
Sick leave											
Days	70	80	107	127	127	127	127	117	86	66	66
Cost	40310	46110	61770	73660	73660	73660	73660	67860	49880	37990	37990
Compassionate leave cols	1160	1160	1160	2320	2320	2320	2320	2320	2320	1160	1160
Productivity	29493	42253	53795	58986	58986	58986	58986	46226	34684	29493	29493
Recruitment	312	312	312	623	623	623	623	623	623	312	312
Training	1869	1869	1869	3739	3739	3739	3739	3739	3739	1869	1869
Sub total	73144	91704	118906	139328	139328	139328	139328	120768	91246	70824	70824
Benefit increase	34452	34452	34452	34452	34452	34452	34452	34452	34452	34452	34452
Compassionate leave family	7578	8331	8805	8998	8950	8736	8448	8156	7873	7674	7561
Bad debt	0	0	0	0	0	0	0	0	0	0	0
Sub total	42030	42783	43257	43450	43402	43188	42900	42608	42325	42126	42013
Total	115174	134487	162163	182777	182730	182515	182228	163375	133570	112950	112836
Discounted total	115174	128083	147086	157890	150332	143006	135981	116108	90406	72808	69272
Present value cost	1326145										

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