REPUBLIC OF ZAMBIA

ZAMBIA COUNTRY REPORT

Monitoring the Declaration of Commitment on HIV and AIDS and the Universal Access

Biennial Report

SUBMITTED TO THE UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON AIDS Declaration of Commitment

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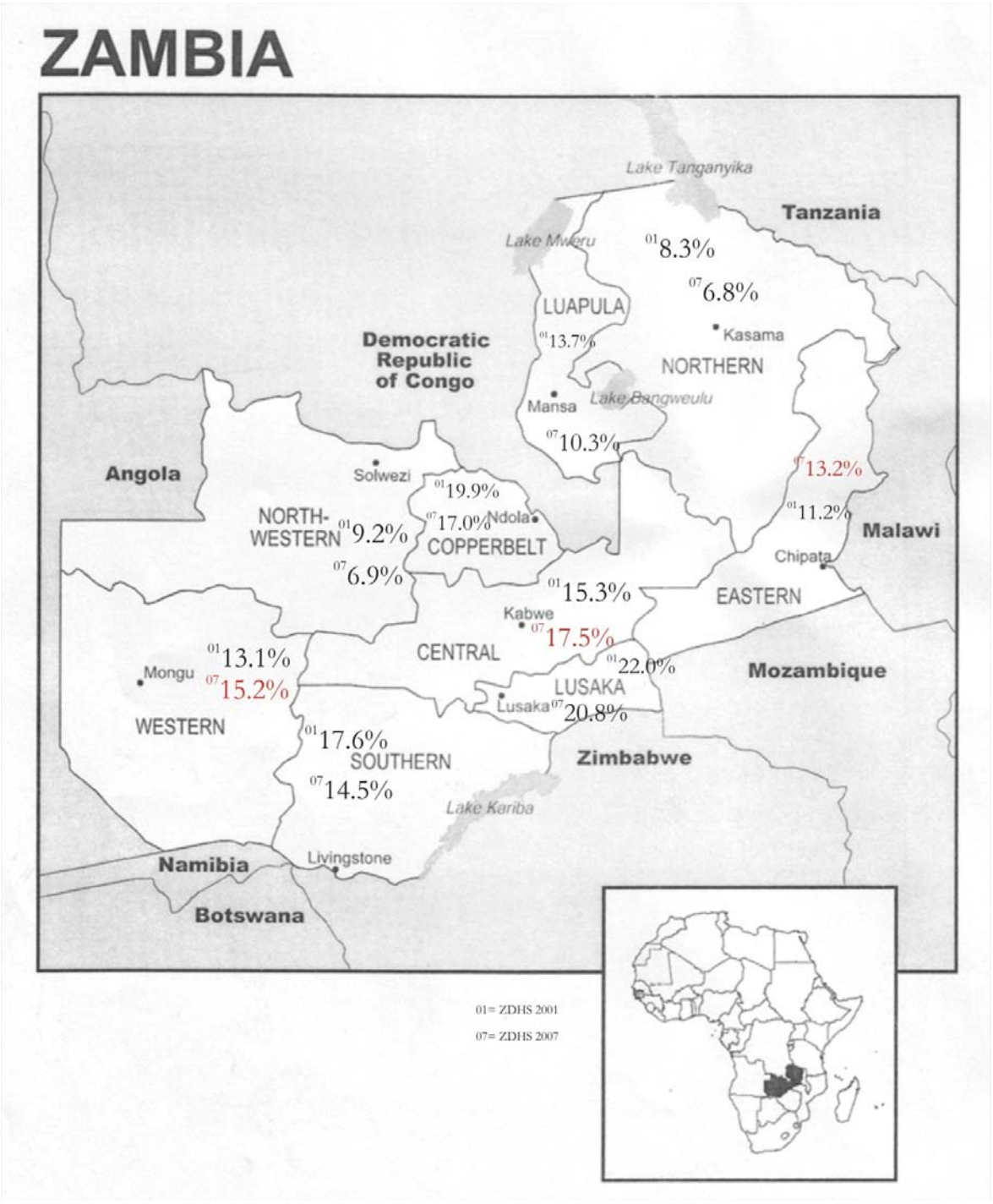
MINISTRY OF HEALTH

NATIONAL AIDS COUNCIL

Map of Zambia



Acknowledgement

The commitment by the Government Republic of Zambia (GRZ) to the United Nations General Assembly Special Session (UNGASS) of 2001 to prepare the Zambia UNGASS Country Progress Report on HIV and AIDS biennially is by any standards a huge one. However, the task of preparing the actual report is much more a formidable undertaking which would not be possible without the commitment of both financial and human resources at various levels from many stakeholders.

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UNGASS Indicators at a Glance

Indicator Category and Description	2005	2007	2008	2009
General				
HIV Prevalence level	15.6	14.3		
HIV Incidence level				1.6
National Commitment & Action				
Amount (US$) of national funds disbursed by governments in low and middle income countries[1]	US$140,566,646	-	-	-
% of transfused blood units screened for HIV	100%	100%	100%	100%
Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know their results	15.6%	15.4%		
Percentage of (MARPs) female sex workers who received an HIV test in the last 12 months and who know their results	19.8%	85.7%	85.7%	74.5%
Percentage of HIV-infected pregnant women who received Antiretrovirals to reduce the risk of mother-to-child transmission	-	-	54.3%	60.9%
Percentage of infants born to HIV-infected women (HIV-exposed infants) receiving ARV prophylaxis to reduce the risk for MTCT	-	-	31.6%	36%
Percentage of infants born to HIV-infected women started on cotrimoxazole (CTX) prophylaxis within the last two months of birth	-	-	29%	34%
Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy	10.7%	38.9%	55.1%	68%
Percentage of estimated HIV-positive incident TB cases that received treatment for TB and HIV	-	40.6	41%	-

Indicator Category and Description	2005	2007	2008	2009
Percentage of orphaned and vulnerable	All=15.6%	All=15.7%		

[1] National AIDS Council National AIDS Spending Assessment, 2007

children aged 0–17 whose households received free basic external support in caring for the child	F=13.4% M=12.5%	F=17.0% M=14.4%		
Ratio of orphans' school attendance to non-orphans' attendanc	1.5	0.93		
Knowledge and Behaviour				
Percentage of young people aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	All=47.8% F=45.2% M=51.2%	ALL=35.3% F=34% M=36.9%		
Percentage of young women and men aged 15–24 who have had sexual intercourse before the age of 15	All-10.3% F=10.2% M=10.5%	All=14.6% F=13.5% M=16.0%		
Percentage of women and men aged 15–49 who had more than one partner in the past 12 months who used a condom during their last sexual intercourse	All=13.8% F=11.8% M=28.6%	All=45.6% F=37.4% M=50.0%		
Impact Indicators				
Percentage of infants born to HIV-infected mothers who are infected	39.0%	12%	10%	6.8%

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Acronyms

ABCs	Abstinence Being Faithfull and Condom use
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
ANCSS	Antenatal Clinic Sentinel Surveillance
ART	Antiretroviral Therapy
ARVs	Antiretrovirals
AU	African Union
BCC	Behaviour Change Communication
BESSIP	Basic Education Sub-Sector Investment Programme
BSS	Behaviour Sentinel Survey
CATFs	Community Aids Task Force
CBOs	Community Based organisations
CDC	Centres for Disease Control
CHAZ	Churches Association of Zambia
CIDRZ	Centre for Infectious Disease Research In Zambia
CLS	Contract Laboratory Services
CoH	Corridors of Hope
COP	Country Operations Plans
CPs	Cooperating Partners
CRAIDS	Community Response to HIV and AIDS
CSOs	Civil Society Organisations
CSW	Commercial Sex Worker
CT	Counselling and Testing
CTX	Cotrimoxazole
DACAs	District Aids Coordinating Advisors
DAIDS	Division of Aids
DATFs	District Aids Task Forces
DBS	Dried Blood Spot
DDCCs	District Development Coordinating Committees
DFID	Department for International Development
DHMT	District Health Management Team
DHS	Demographic Health Survey
DNA	Data Not Available
DWACs	District Welfare Assistance Committees
EMIS	Education Management and Information System
EU	European Union
FBOs	Faith Based Organisations

FGDS	Focus Group Discussions
FNDP	Fifth National Development Plan
FSWS	Female Sex Workers
GFATM	Global Fund to Fight HIV and AIDS, Tuberculosis and Malaria
GIPA	Greater Involvement of People Living with AIDS'
GRZ	Government of The Republic of Zambia
HAART	Highly Active Antiretroviral Therapy
HBC	Home Based Care
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IDU	Intravenous Drug Use
IEC	Information Education Communication
IOM	International Organisation for Migration
JICA	Japanese International Development Agency
JMTR	Joint Mid-Term Review
LDTD	Long Distance Truck Drivers
LSE	Life Skills Education
M&E	Monitoring and Evaluation
MAP	Multi-Country AIDS Programme
MARP	Most at Risk Populations
MC	Male Circumcision
MCH	Maternal and Child Health
MCP	Multiple and Concurrent Sexual Partners
MDGs	Millennium Development Goals
MOE	Ministry of Education
MoFNP	Ministry of Finance And National Planning
MoH	Ministry of Health
MSM	Men Who Have Sex With Men
MSP	Mean Site Prevalence
MSYCD	Ministry of Sport, Youth and Child Development
MTCT	Mother to Child Transmission
NAC	National Aids Council
NAC	National HIV and AIDS/STI/TB Council
NACMIS	National Aids Council Management and Information System
NARF	National Activity Reporting Form
NASA	National Aids Spending Assessments
NASF	National AIDS Strategic Framework
NCPI	National Composite Policy Index

NGOs	Non-governmental Organisation
NGP	National Gender Policy
NPA	National Programme of Action
NZP+	Network of Zambian People Living with HIV
OIs	Opportunistic Infections
OVC	Orphans and Vulnerable Children
PACAs	Provincial Aids Coordinating Advisors
PCR	Polymerase Chain Reaction
PDCCs	Provincial Development Coordinating Committees
PEPFAR	United States President's Emergency Plan For AIDS Relief
PITC	Provider Initiated Testing and Counselling
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission
PPP	Purchasing Power Parity
SADC	Southern Africa Development Community
SAGs	Un Sector Advisory Groups
SIDA	Swedish International Development Agency
SNDP	Sixth National Development Plan
TB	Tuberculosis
UA	Universal Access
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNGASS	United Nations General Assembly Special Session for HIV and AIDS
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UTH	University Teaching Hospital
VCT	Voluntary Counselling and Testing
WHO	World Health Organisation
ZANARA	Zambia National Response to HIV and AIDS
ZDHS	Zambia Demographic Household Survey
ZNAN	Zambia National Aids Network
ZNBT	Zambia National Blood Transmission
ZPCT	Zambia Prevention Counselling and Testing
ZSBS	Zambia Sexual Behaviour Survey

EXECUTIVE SUMMARY

Introduction

Zambia last reported to the UNGASS on HIV and AIDS in 2008 and since then, the country has made progress in a number of areas towards implementing the Political Declaration of Commitments on HIV and AIDS which the Zambian government together with 189 other member states endorsed and adopted in June 2001. Recognising the need for multi-sectoral action on a range of fronts, the Declaration of Commitments on HIV and AIDS addresses global, regional and country-level responses to prevent new HIV infections, expand health care access and mitigate the epidemic's impact. In the 2005 World Summit Outcome (resolution 60/1), world leaders committed to a massive scaling up of HIV prevention, treatment and care with the aim of coming as close as possible to the goal of universal access to treatment by 2010 for all who need it. In July 2005, in the Gleneagles Communiqué, leaders of the Group of Eight countries expressed their strong support for working towards this goal. The country processes build on earlier efforts, such as the '3 by 5' initiative to expand HIV treatment.

The vision of the declaration extends far beyond government sector to include the private industries and labour groups, faith based organisations, non-governmental organisations and other civil society entities including organisations of people living with HIV and AIDS.

Zambia National Monitoring and Evaluation Report 2010

The 2010 Monitoring and Evaluation Report is a joint reporting of the UNGASS and Universal Access (UA) progress reporting.

The information provided in this report represents the most recent and comprehensive set of standardised data on the status of the epidemic and progress in the response in Zambia, taking into consideration some of the data gaps identified by the 2008 UNGASS feedback report from UNAIDS and the 2009 Health Sector Response to HIV and AIDS Monitoring and Reporting. An evidence based approach was used for all the data presented in this report, relying largely on already published reports and complimenting with expert views and analysis.

Overview of the HIV and AIDS Epidemic

In 2009, 14.3 per cent of Zambia's estimated 12.9 million population was infected with HIV. Zambia is seventh among the countries experiencing the effects of a mature and generalised hyper-endemic. The country is one of the most urbanised countries in sub-Sahara Africa. Demographic and ecological variables put certain groups of the population at greater risk of HIV and AIDS and therefore demands targeted interventions.

Zambia has not systematically monitored HIV prevalence in populations usually at high risk of HIV, such as sex workers, men who have sex with men (MSM), prisoners, men in uniform and transport workers. The available HIV prevalence data confirm that female sex workers, STI and

TB patients, MSM and prisoners are disproportionately infected with HIV in Zambia. A review of the estimates of trends in HIV incidence revealed[2] that HIV incidence in adults aged 15-49 years has halved since 1990 and is estimated to be at a stable level at 1.6 per cent in 2009 (2 per cent in women and 1.2 per cent in men). Over 900,000 people are estimated to be living with HIV and AIDS in Zambia, of which nearly 80,000 are the newly infected (MoH/NAC/CSO). In spite of nearly 8 per cent of the population living with HIV and AIDS, many challenges exist in ensuring that their human rights are respected and protected and they have equitable access to goods and services that are available to people not infected with HIV.

Policy and Management

Zambia is signatory to a number of global and regional agreements and declarations including the Millennium Development Goals, the Paris Declaration, UNGASS Declaration, Universal Access, Abuja Declaration, African Union Maseru/Maputo Declaration, and SADC Protocols. At country level, legal and policy frameworks have been developed. These include the National HIV and AIDS/STD/TB Act (2002), National Decentralisation Policy (2002), National HIV and AIDS/STI/TB Policy (2005), National HIV and AIDS Strategic Framework (2006-2010), Fifth National Development Plan (2006-2010), Population Policy (2007), Reproductive Health Policy (2008), and the Zambia Decent Work Country Programme (ZDWCP)2007-2011.

The national response is multi-sectoral and designed in line with the '3 Ones Principle', which requires one national AIDS strategic framework, one national coordinating body and one monitoring and evaluation (M&E) system. Most of the relevant institutional arrangements required for a multi-sectoral national AIDS response are in place. The national response has been dealing with the issues of governance, poverty, gender, economic, socio-cultural, legal, sexual violence and physiological factors that are different for men and women in addressing the HIV and AIDS epidemic. Gender and HIV and AIDS have been mainstreamed in most areas as evidenced by the sectors in the Fifth National Development Plan and is being emphasised in the Sixth National Development Plan currently in production. However, the rate of implementation of these policies is slow.

National Response to the AIDS Epidemic

National AIDS Spending by Category and Financing Sources

Zambia last reported on the AIDS spending for 2005 and 2007. For the current reporting period no new data was available although a study is currently underway for the National AIDS Spending Assessment.

National Composite Policy Index

The purpose of the *National Composite Policy Index* (NCPI) is to assess progress in the development and implementation of national-level HIV and AIDS policies, strategies and laws. The NCPI reflects the overall policy, strategy, legal and programme implementation environment in the country.

[2] Zambia HIV Prevention Response and Modes of Transmission Analysis, 2009.

Overall, the rating on policies, laws and regulations in place to protect human rights in relation to HIV in 2009 remains low and the same applies for the rating on the effort to enforce the existing policies, laws and regulations in 2009.

Key achievements in the area of human rights since 2007 include the roll out of free ART to government clinics, thereby, contributing to meeting the need for the right to health and the sensitisation work on the policy for the non-screening for employment purposes. Challenges remain in this area: knowledge levels about the laws on human rights and discrimination are still very low, especially in rural areas and there is need for more sensitisation. The country still does not have a law for protecting people living with HIV and AIDS and other sub-populations including HIV disabled persons (there are no specific HIV messages for the deaf and blind). Other high risk groups such as sex workers, prisoners, MSMs and IDUs do not have their rights safeguarded as targeting specific interventions at them may not augur well with existing laws.

National Programmes Indicators

The national HIV prevention, treatment and care strategy is focused on prevention of HIV transmission through blood, voluntary counselling and testing and prevention of HIV transmission through health care and other care settings including support for children affected by HIV and AIDS, provision of ART services including prevention of mother to child transmission.

Zambia has maintained 100 per cent of donated blood units that are screened in a quality assured manner, an achievement which was also attained during the last reporting period. All ZNBTs facilities and activities are subjected to rigorous External Quality Assessments with the RCPA Serology Quality Assurance Programme Private in Australia for HBV and HCV, and with Contract Laboratory Services (CLS) of South Africa for HIV. The ZNBTs Lusaka Laboratory is also periodically audited by the Division of AIDS (DAIDS) of the National Institute of Health of the USA, on HBV and HCV tests only.

Only 15 per cent of sexually active adults know their HIV status. Multiple approaches exist to improve knowledge about status. These include home-based and mobile testing, fixed sites where clients can seek services, and testing and counselling in health facilities for pregnant women, testing of TB patients, testing of in-patients and out-patients in health care facilities. Regular testing and early identification of infected adults is a critical path to access of care and treatment, while testing of couples and appropriate counselling contributes to prevention.

Pregnant and lactating women are at high risk for HIV infection; 2 per cent to 3 per cent will acquire HIV infection during each pregnancy. 11 per cent of married couples are discordant for HIV. Lack of knowledge of partner status and low levels of condom use in longer term relationships contribute to high transmission of HIV within stable relationships and families. Pregnancy care is a key gateway to the delivery of integrated services to families because 80 per cent of pregnant women are tested for HIV in antenatal clinics. Only 10 per cent of partners are tested and this missed opportunity must be addressed with a goal of universal coverage with family-oriented prevention of HIV. During the period January to December 2009, a total of 532,484 pregnant women were tested for HIV (during pregnancy, during labour and delivery and

during post-partum period (<72 hours) including those with previously known HIV status out of which 505,859 received their results.

The number of HIV-infected pregnant women who received ARVs to reduce the risk of mother-to-child transmission of HIV in the last 12 months for the period January to December 2009 was 47,175 or 60.9 per cent of the estimated 77,465 HIV infected pregnant women.

Due to the rapid scale-up of HIV care and treatment in the country, many patients have resumed active, productive lives with reduction and frequency of illnesses that require in-patient care. The percentage of adults and children with advanced HIV infection receiving antiretroviral therapy was 68 per cent out of an estimated total population of 416,533 who were in need of ART as at December 2009. From an estimated ART need of 382,569 adults who are 15 years and older, 69 per cent were accessing treatment while slightly less (62 per cent) children (less than 15 years) were on treatment out of the estimated 33,964 in need.

An analysis of trends in the rate of school attendance among orphans aged 10-14 years who had lost both parents showed an increasing rate from 73.6 per cent out of 72 children who had lost both parents in 2000 to 76.5 per cent (out of 154) in 2003 before peaking in 2005 at 91.9 per cent (out of 99) in 2005. In 2009, the rate of school attendance among orphans aged 10-14 years who had lost both parents dropped to 81.0 per cent.

One of Zambia's major goals in the response to HIV and AIDS is to delay the age at which young people first have sex and discourage premarital sexual activity because it reduces their potential exposure to HIV. Preliminary data from the ZSBS 2009, show that more females were likely to delay their sexual debut than the males among the 15-24 years young males and females in the survey. For the males 15-24 years, 8.2 per cent reported that they have had sexual intercourse before the age of 15 while for females in the same age group, 6.8 per cent reported having had sex before the age of 15.

Condom use is an important measure of protection against HIV, especially among people with multiple sexual partners. Overall, 45.6 per cent of the 2,551 women and men 15-49 years who had sexual intercourse with more than one partner reported using a condom during their last sex. More males (50 per cent of 1,655) were likely to use a condom than women (37.4 per cent of the 896) among young men and women involved in higher risk sex.

Preliminary data from the 2008 ANC Sentinel Surveillance Survey indicate that the HIV prevalence for the antenatal attendees aged 15-24 years will be within the same rate at 9 per cent for the age group 15-19 years and at 16 per cent for the age group 20-24 years. Since 1994 HIV infection for this age group has shown a downward trend, dropping from 21.9 per cent to 16 per cent in 2008 for the age group 20-24 years. For the 15-19 year-olds, the rate of infection has also had a downward pattern from 14.1 per cent in 1994 and dropping to 10.9 per cent in 1998. However, in 2002 the infection rate for this age group rose to 12.6 per cent and then maintained the downward trend dropping to 11.7 per cent in 2004. It further dropped to 9.1 per cent in 2006 and then to 9 per cent in 2008.

Major Challenges 2008/2009 Reporting Period

The Impact of ART and PMTCT services in Zambia, NAC (2010) highlighted a number of bottlenecks and barriers to accessing ART and PMTCT services. Among the major ones during the current reporting period were the following:

The increase in service demand has not matched the infrastructural development in facilities offering ART. It is difficult to talk about confidentiality in some facilities due to lack of space and congestion. Patient files are sometimes kept in two or three different places due to lack of space.

In terms of quality of service, the PMTCT programme has endeavoured to equip the staff providing the service with adequate knowledge. The shortage of adequate numbers of staff still puts a lot of stress on the few so that in the end, quality is still compromised.

There is still limited access to infant diagnostic techniques while the turnaround time, especially for peripheral facilities, remains too long for those accessing such services thereby defeating the much desired early infant diagnosis.

The expansion of ART services have progressed well and no stock outs or shortages were reported for the year 2009. The complaint was in the supply of drugs for opportunistic infections which were reportedly out of stock at the time of survey.

Support from the Country's Development Partners

The national response to HIV and AIDS in Zambia has continued receiving support from CPs to address many elements of the HIV and AIDS response. The support comes in various ways including secondment of staff to NAC; strengthening of resource management system; payment of the salaries of DACA and PACA for the last four years; provision of transport vehicles for all provinces and districts and mainstreaming and decentralisation of the national AIDS response to all sectors among others.

Monitoring and Evaluation Environment

The National AIDS Response is based on the 'three ones' principles, i.e. one agreed action framework, one national coordinating authority, and one agreed upon country level monitoring and evaluation (M&E) system. The National AIDS Council M&E system has well formulated guidelines; functioning structures especially at the central level, human resources, funding, reference materials, and a dedicated technical working group. Some of the key achievements during period under review include the completion of the NAC Information System (NACMIS) design and rolling out to all provinces of the country. In collaboration with the National Association for State and Territorial Directors (NASTAD), training was started at the community level to strengthen capacity for data collection, management and analysis and

funding was sourced for the recruitment of M&E/ IT officers who will be based at provincial level.

The major challenges experienced were that the monitoring and evaluation group has not functioned optimally while the Joint-Annual review was not conducted. Harmonisation of M&E systems between the NAC and the MoH continued to persist and requires improvement.

Chapter 1: INTRODUCTION

1.1 Overview on UNGASS Declaration of Commitments on HIV and AIDS

At the close of the groundbreaking UNGASS on HIV and AIDS in June 2001, 189 member states adopted the *Declaration of Commitment on HIV and AIDS*. It reflects global consensus on a comprehensive framework to achieve the Millennium Development Goal of halting and beginning to reverse the HIV epidemic by 2015. Recognising the need for multi-sectoral action on a range of fronts, the *Declaration of Commitment on HIV and AIDS* addresses global, regional and country-level responses to prevent new HIV infections, expand health care access and mitigate the epidemic's impact.

Although governments initially endorsed the *Declaration*, the document's vision extends far beyond the governmental sector to private industry and labour groups, faith-based organisations, non-governmental organisations and other civil society entities, including organisations of people living with HIV. In 2006 member states of the United Nations renewed these commitments in a *Political Declaration on HIV and AIDS* to achieve universal access to HIV treatment, prevention, care and support by 2010.

Under the terms of the *Declaration of Commitment on HIV and AIDS*, success in the AIDS response is measured by the achievement of concrete, time-bound targets. They call for careful monitoring of progress in implementing agreed-on commitments and require the United Nations Secretary-General to issue progress reports annually. These reports are designed to identify problems and constraints and recommend action to accelerate achievement of the targets.

In keeping with these mandates, in 2002 the UNAIDS Secretariat collaborated with national AIDS committees, UNAIDS co-sponsors, and other partners to develop a series of core indicators to measure progress in implementing the *Declaration of Commitment on HIV and AIDS*. The core indicators were grouped into four broad categories:

(i) national commitment and action;
(ii) national knowledge and behaviour;
(iii) national impact; and
(iv) global commitment and action.

For the reporting period of 2002 to 2003, 103 member states (55 per cent) submitted Country Progress Reports to UNAIDS based on the core indicators. In most cases, National AIDS Committees or equivalent bodies oversaw compilation of the national report and more than three-quarters of them included input from three or more government ministries. Civil society was involved in the preparation of about two-thirds of the reports and people living with HIV were involved in just over half of them.

In 2005, Zambia was among the 137 member states (72 per cent) that submitted Country Progress Reports for the reporting period of 2004 to 2005, representing a 33 per cent increase in the number of countries reporting. Of these reports, 40 were from sub-Saharan Africa, 21 from Asia and the Pacific, 32 from Latin America and the Caribbean, 21 from Eastern Europe and Central Asia, 5 from North Africa and the Middle East and 18 from high-income countries.

Zambia once again was among 153 member states (80 per cent) that submitted Country Progress Reports in 2008 for the reporting period of 2006 to 2007. This represented a 12 per cent increase in the number of countries reporting in the previous round. Of these reports, 45 were from sub-Saharan Africa, 20 from Asia and the Pacific, 32 from Latin America and the Caribbean, 18 from Eastern Europe.

1.2 Overview on Universal Access

The assessment by the Joint United Nations Programme on HIV and AIDS (UNAIDS) of inclusive, country-driven processes for scaling up HIV prevention, treatment, care and support is submitted pursuant to General Assembly resolution 60/224. In that resolution, the Assembly requested UNAIDS and its co-sponsors to assist in facilitating such processes, with the aim of coming as close as possible to the goal of universal access to treatment by 2010 for all those who need it, including through increased resources, and working towards the elimination of stigma and discrimination, enhanced access to affordable medicines and the reduction of vulnerability of persons affected by HIV and AIDS and other health issues. The Assembly also requested that UNAIDS submit, for consideration at its sixtieth session, an assessment of these processes, based on inputs received from member states, including an analysis of common obstacles to scaling up and recommendations for addressing such obstacles, as well as for accelerated and expanded action.

In the 2005 World Summit Outcome (resolution 60/1), world leaders committed to a massive scaling up of HIV prevention, treatment and care with the aim of coming as close as possible to the goal of universal access to treatment by 2010 for all who need it. In July 2005, in the Gleneagles Communiqué, leaders of the Group of Eight countries expressed their strong support for working towards this goal.

These ambitious commitments have brought the AIDS response to another historic juncture. In response to the request of the General Assembly contained in its resolution 60/224, the Secretariat and co-sponsors of the Joint United Nations Programme on HIV and AIDS (UNAIDS) have helped to facilitate inclusive, country-led processes to develop practical strategies for moving towards universal access. In the present report, UNAIDS assesses those processes. The assessment includes an analysis of common obstacles and recommendations for overcoming them, through an exceptional approach in which HIV prevention, treatment, care and support are integrated with broader health and social services such as programmes for primary health care, mother and child health, sexual and reproductive health, tuberculosis, nutrition, orphans and vulnerable children, as well as formal and informal education.

The country processes build on earlier efforts, such as the '3 by 5' initiative to expand HIV treatment. The number of people on antiretroviral therapy in low- and middle-income countries nearly doubled in 2005 alone, from 720,000 to 1.3 million.

1.3 Zambia National Monitoring and Evaluation Report 2010

The 2010 Monitoring and Evaluation Report is a joint reporting of the UNGASS and Universal Access (UA) progress reporting.

The information provided in this report represents the most comprehensive set of standardised data on the status of the epidemic and progress in the response in Zambia, taking into consideration some of the data gaps identified by the 2008 UNGASS feedback report from UNAIDS and the 2009 Health Sector Response to HIV and AIDS Monitoring and Reporting. An evidence-based approach was used for all the data presented in this report, relying largely on already published reports and complimenting with expert views and analysis.

The National AIDS Council (NAC) in collaboration with the Ministry of Health, civil society organisations, the private sector and other line ministries, coordinated the 2010 reporting process. A multi-disciplinary and multi-sectoral steering committee of the NAC constituted the technical team, which provided technical oversight and validation throughout the report generation process.

1.4 Zambia Country Report Structure 2010

The Zambia Country Progress Report 2010 to the United Nations General Assembly Special Session on HIV and AIDS contains the most recent data on the progress made in the national and health sector response to HIV between 2008 and 2009.

The report presents an overview of the general status of the epidemic and the policy and programmatic environment within the first two chapters and then outlines the national response. For the national response, the current status is first presented and then followed by trends where possible. The seven chapters of this report define the main report while the main annexes are the UNGASS 2010 Reporting Tool which contains:

(i) Consultation/ preparation for the country report on monitoring the progress towards the implementation of the Declaration of Commitments on HIV and AIDS and the Universal Access;
(ii) NGASS Indicator Values for 2008 and 2009 (as separate document);
(iii) National Composite Policy Index (as separate document);
(iv) Universal Access Reporting Tool (as Separate document);
(v) Contributors to the report;
(vi) List of UNGASS Task Force;
(vii) List of participants to the three consultative/validation meetings; and
(viii) List of interviewees for the NCPI.

Chapter 2 OVERVIEW OF THE HIV AND AIDS EPIDEMIC

2.1 Status of the HIV and AIDS Epidemic

2.1.1Demographics

According to the Zambia 2000 Census of Population and Housing report, the projected population for Zambia was approximately 12.5 million and 12.9 million for 2008 and 2009 respectively of which an estimated 45 per cent were less than 15 years for both years under review. Population estimates for the children under 15 years remained almost the same as reported during the last reporting period for Zambia which stood at 44 per cent. Equally estimates for the sex distribution remained constant at 50 per cent for males and females. With approximately 36 per cent of the population living in rural areas, Zambia is one of the most urbanised countries in sub-Sahara Africa. Demographic and ecological variables put certain groups of the population at greater risk of HIV and AIDS and therefore demands targeted interventions.

Since the last reporting period, Zambia's Human Development Index (HDI) value has increased from 0.434 in 2006 to 0.481 in 2009. The countries ranking also moved from 163 out of 179 countries to 164 out of 182 countries. The country remains among the lowest HDI in the world. However, the index showed that life expectancy for Zambia had increased to 44.5 years in the last four years. The HDI provides a composite measure of three dimensions of human development: living a long and healthy life (measured by life expectancy), being educated (measured by adult literacy and gross enrolment in education) and having a decent standard of living (measured by purchasing power parity, PPP, income)[3].

In addition, 36 per cent of the population are still economically inactive while of the remaining 64 per cent in the labour force, 43 per cent are employed, 12 per cent are unpaid family workers while 12 per cent are unemployed.

The above scenario shows that unemployment is high and continues to present a serious social problem. A combination of a low human development index and high unemployment presents a significant challenge for HIV and AIDS in Zambia.

According to the Zambia Situation Analysis of Children and Women, 2008, the relationship between HIV and AIDS and poverty has been widely discussed in other studies. While there is no direct relationship between poverty and HIV infection rates, there is plenty of evidence[4] to suggest that for each affected household and person, HIV brings economic pressures and disadvantages that tend to increase poverty.

2.1.2 HIV Prevalence in General Population

Zambia's first HIV infection case was reported in 1984. Since then, infection rates have increased rapidly with the adult HIV prevalence peaking in mid 1990s at about 16 per cent and then levelling off and stayed above 14 per cent ever since. Spectrum estimates of HIV prevalence among adults aged 15-49 years suggest that the Zambia HIV epidemic has been fairly stable over

[3] 2009 global human development report.
[4] Zambia Mode of transmission Report, 2009.

the last 15 years with a very modest decline after the initial peak prevalence. The Spectrum estimate for the adult HIV prevalence in 2009 is 14.6 per cent.

Zambia is seventh among the countries experiencing the effects of a mature and generalised hyper-endemic[5]. No changes in prevalence have occurred since the last reporting period since the life of the last DHS is still valid. According to the 2007 Zambia Demographic Household Survey (ZDHS), 14.3 per cent of adults aged 15-49 years were HIV positive dropping by 1.3 per cent from the 15.6 per cent reported in ZDHS of 2001/2. It must be noted, however, that Zambia is among the countries in the region with the smallest prevalence drop between 2001 and 2007 and therefore making the change statistically insignificant[6]. The most recent Antenatal Clinic Sentinel Surveillance (ANCSS) of 2006, intervals shows a larger crude Mean Site Prevalence (MSP) decline, similar in magnitude to the ZDHS of 2007 prevalence decline for women (from 17.8 per cent to 16.1 per cent) – but occurring within the two year ANCSS intervals of 2004-2006 instead of $5^{1}/_{2}$ years of the ZDHS interval of 2001/2. Although these decreases in prevalence have been achieved, it must be noted also that:

(i) the country must continue to try to evaluate what part of this measured decline is due to increased survey bias resulting from increased self knowledge of HIV-status, and self exclusion; and

(ii) the 2001/2 - 2007 ZDHS decline in prevalence still represents an increase of approximately 300,000 to 400,000 infected persons, due to population growth over the same period which outweighed the prevalence.

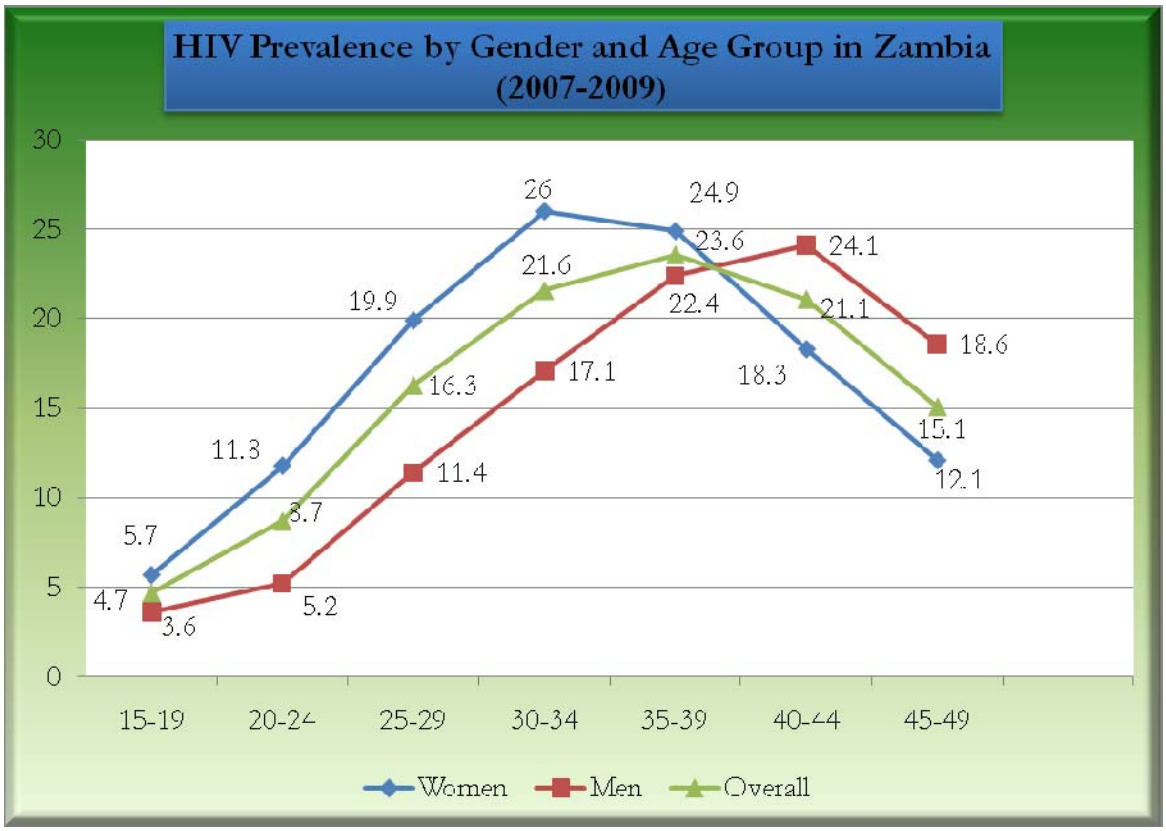
Based on the current ANCSS and the DHS, the current pattern of the HIV epidemic show that unless there is drastic behaviour change, the percentage of the adult population (15-49 years old) newly infected with HIV will always be higher than the projected percentage that is likely to die from AIDS between 1984 and 2015.

Further review shows that the prevalence rates in Zambia vary significantly according to age, sex and geographical area. Of the approximately 1 million Zambians who are living with HIV and AIDS (2006), 4 per cent or 40,000 are children aged 0-14 years. The HIV prevalence shows a significant increase from 15-19 years age group (4.7 per cent) and peaks at 23.6 per cent for the age group of 35-39 years and then drops to 15.1 per cent for the 45-49 years age group. Of particular concern is the HIV prevalence among young women. Young women between the ages 15-19 years are more likely to be infected with an HIV prevalence of 5.7 per cent as compared to young men of the same age group at 4.7 per cent. For the age group 20-24 years, this gap widens with young women showing HIV prevalence of 11.8 per cent which is twice that of young men of the same age group at 5.2 per cent, reflecting their specific vulnerability in sexual relationships. Other indicators show the HIV prevalence for women peak at 26 per cent and this is for the age group 30-34 years while for the men the peak is at 24.1 per cent although

[5] Joint Mid-Term Review of the National AIDS Strategic Plan 2006-2010.
[6] Zambia HIV Prevention Response and Modes of Transmission Analysis, 2009.

this is for the age group of 40-44 years[7]. Figure 2.1 further illustrates more indicators on HIV prevalence by sex and age based on the ZDHS, 2007.

Figure 2.1: HIV prevalence by sex and age based on the ZDHS 2007



Source: ZDHS, 2007

The ZDHS (2007) further reports a wide geographical differential in HIV infection in the country. On the average, urban adult HIV prevalence at 19.7 per cent is twice that of the rural areas at 10.3 per cent. This pattern is similar to that reported in the 2001/2 ZDHS which showed the prevalence rate of 23 per cent in urban areas compared to 11 per cent in rural areas. Significant differences in HIV prevalence were reported by province ranging from 6.8 per cent in Northern province to 20.8 per cent in Lusaka province.

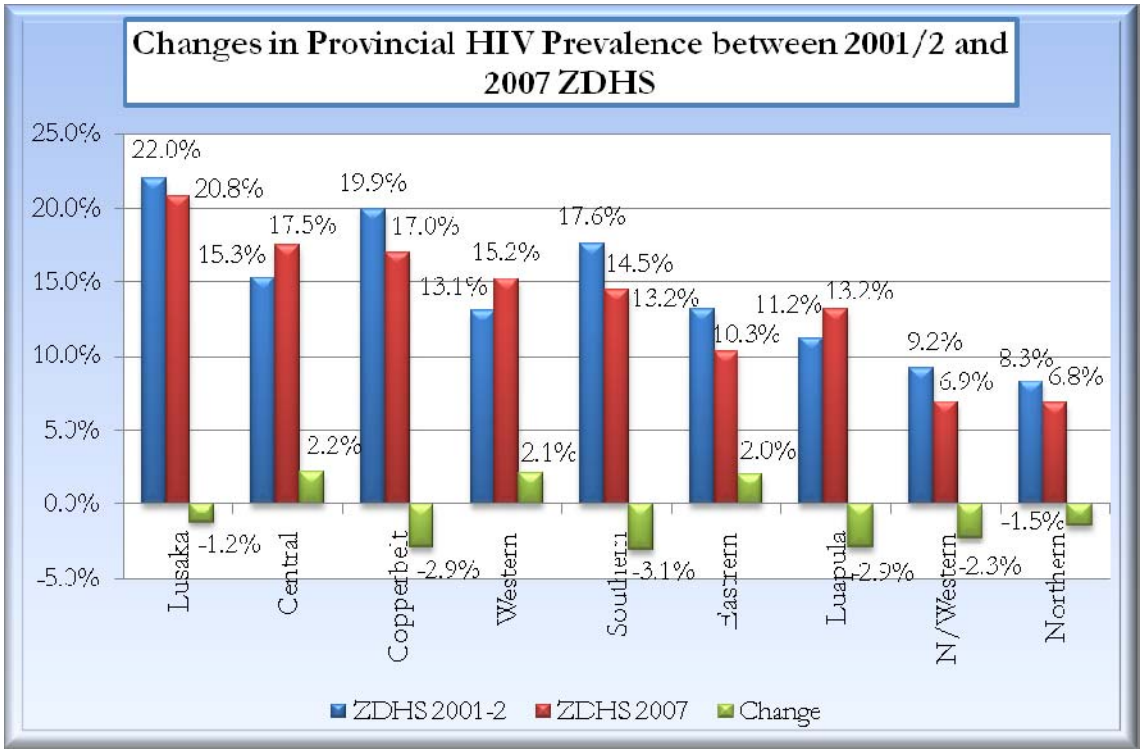
Further, three provinces of the nine showed increases in the HIV prevalence with Central province increasing by 2.9 per cent from 15.3 per cent to 17.5 per cent between 2001/2 and 2007 while Western province HIV prevalence increased by 2.1 per cent from 15.2 per cent to 15.2 per cent and Eastern province which posted an increase of 2 per cent from 11.2 per cent to 13.2 per cent for the same period. With the other six provinces showing a reduction in HIV

[7] ZDHS, 2007

prevalence, Central province is now second only to Lusaka province surpassing Copperbelt province while Western Province has moved from being the sixth province in 2001/2 with the most infected population to fourth in the country by 2007.

Figure 2.2 further illustrates the changes in HIV prevalence by province between the ZDHS 2001/2 and ZDHS, 2007.

Figure 2.2: Trends in provincial HIV prevalence between ZDHS 2001/2 and 2007



Source: ZDHS, 2007

Zambia's urban and rural HIV epidemics show significant differences in their scale and epidemic trend. Urban residents are significantly more likely to be HIV positive. While the urban epidemic has been contracting, especially among urban men, the rural epidemic only shows a minor prevalence decrease between the two last DHSs. In 2007, HIV prevalence was significantly higher in urban women than urban men. In contrast, in rural areas, gender-specific HIV prevalence levels are similar.

With the ANCSS, Zambia has comparable data for more than a decade from 1994 to 2006. The nation also uses the Antenatal Sentinel Surveillance Survey to estimates the HIV prevalence among the general population. The country has been using HIV prevalence in women aged 15-19 years as a proxy for incidence.

In ANC clients aged 15-19, HIV mean site prevalence (based on 21 sites) was 13.9 per cent in 1994, dropped to 12.0 per cent in 2002, and 8.5 per cent in 2006-07 (Figure 2.5). This suggests that HIV incidence is falling.

A less pronounced downward trend in HIV prevalence of women aged 15-19 was observed in DHS data (all women aged 15-19 years, regardless of sexual activity). In the 2001-02 DHS, the HIV prevalence was 6.6 per cent in this age group and 5.7 per cent in the 2007 DHS (p=0.48).

Figure 2.3 also shows that though overall HIV prevalence among antenatal attendees has remained relatively unchanged during the period, there was a drop in HIV MSP in the year 2006. The HIV MSP dropped from 11.5 per cent in 2004 to 8.5 per cent in 2006 among women aged 15-19 years and from 18.6 per cent to 16.6 per cent among women aged 15-39 years.

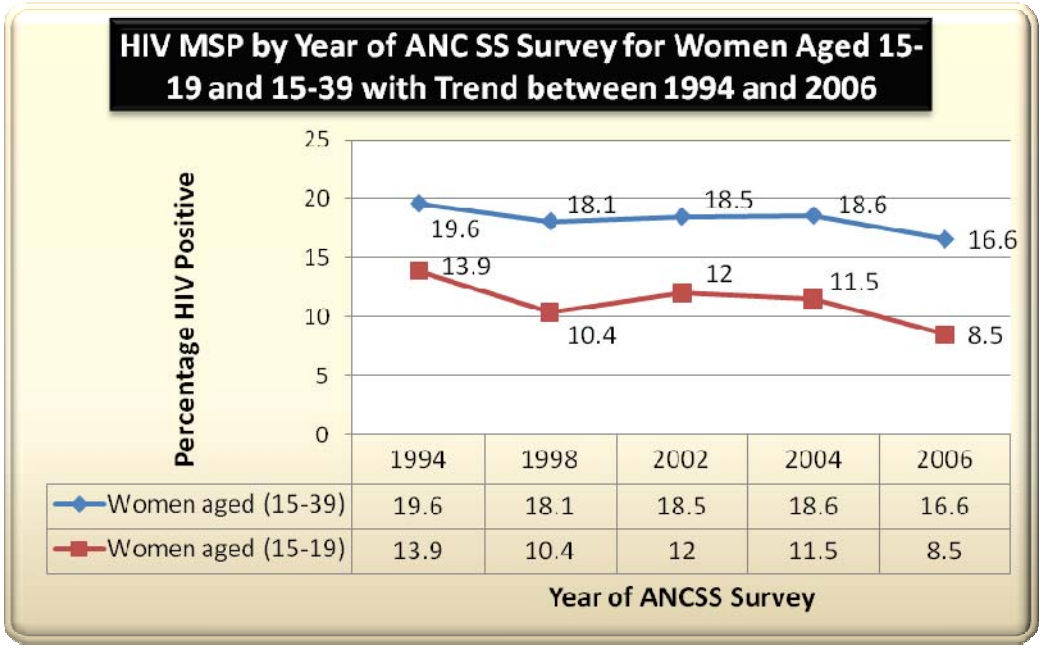
Further review of the report revealed that for each ANCSS survey the HIV MSP was consistently the lowest in the 15-19 years age group and highest in the 25-29 years age group. HIV MSP was lower in 2006 as compared to 2004 in every age group. However, for the age group 30-39 years age group, a reversal in trends was reported showing that the HIV MSP increased with each survey for the years 1994 to 2004 and then dropping in 2006. Actual indicators showed an increase in the HIV MSP for the age group 30-39 years from 17.4 per cent in 1994 and 1998 to 20.0 per cent in 2002 and then 21.2 per cent in 2004 before achieving a drop to 20.6 per cent in 2006[8].

Stringer *et al.,* (2008) analysed HIV prevalence in ANC clients in Lusaka District and found a significant decrease between 2002 (24.5 per cent) and 2006 (21.4 per cent, p< 0.001). Among women <17 years of age, seroprevalence declined from 12.1 per cent (N=635) to 7.7 per cent (N=481, p=0.015). The authors concluded that in Lusaka District, maternal HIV prevalence was declining and the decline was most dramatic among women <17 years of age, suggesting a reduction in incidence in this important age group.

Figure 2.3 shows the HIV MSP for women aged 15-19 years and 15-39 years who participated in the Zambia ANCSS for the years 1994-2006.

[8] Zambia Antenatal Clinical Sentinel Surveillance Report 1996-2006.

Figure 2.3: Trends in HIV prevalence based on ANC Surveys for Women 15-19 and 15-39 (1994-2006)



Data Source: Zambia ANCSS Report, 1994-2006

2.1.3 HIV Prevalence in Sub-Populations

At the time of this review, few HIV prevalence data were available from sub-populations including those likely to be at high risk of acquiring HIV or of transmitting HIV – see Table 2.1. The BSS studies done in the past have sometimes measured prevalence of other STIs (gonorrhoea, chlamydia, trichomoniasis and syphilis), but not HIV. With the available HIV prevalence data on higher risk groups, it is not possible to determine HIV prevalence trends over time.

Table 2-1 HIV prevalence data in sub-populations

Population	HIV prevalence	Sources
Female sex workers	69% (Ndola, 1987-88, N=319) 65% (Ndola, 2005, N=283)	Buve *et al.* 1991 Kamanga *et al.* 2005
STI patients	Major urban sites: 57% (1990), 64% (1991), 58% (1993) Outside major urban sites: 45% (1990), 43% (1991)	UNAIDS ESF 2008
TB patients	Lusaka site: 61% (1990), 83% (1999) Rural site: 52% (1990)	UNAIDS ESF 2008
MSM	33% (2006, N=641)	Zulu *et al.*, 2006
Prisoners	Kitwe, Kabwe, & Solwezi (prison sites Kamfinsa, Mukobeko, & Solwezi): 27% (1998-99, N=1566)	Simooya *et al.*, 2001
Police recruits	15.4% (Lusaka, 1991, N=312) 11.5% (Lusaka, 1992, N=87)	Msiska, R., 1992
Refugees	Kala Camp: 3.3% (2006, N=300), Mwange Camp: 2.4% (2006, N=295) Maheba Camp: 3.9% (2006, N=304)	ANC Sentinel Survey Report 1994-2006

Source: HIV Prevention Response and Mode of Transmission Analysis (NAC, 2009)

Zambia has not systematically monitored HIV prevalence in populations usually at high risk of HIV, such as sex workers, men who have sex with men (MSM), prisoners, men in uniform and transport workers. The available HIV prevalence data confirm that female sex workers, STI and TB patients, MSM and prisoners are disproportionately infected with HIV in Zambia. Refugees assessed in three camps in 2006 were found to have prevalence levels well below population prevalence. The review could not identify any HIV prevalence data from transport workers.

The most striking heterogeneities in the Zambian HIV epidemic are:

(i) Significantly higher HIV prevalence in;
   a) adult women, young women and urban women compared to adult men, young and urban men.
   b) women often travelling and spending the night away from home, compared to women staying at home.
   c) men and women with higher education compared to those with no or little school education.
   d) urban residents compared to rural residents.
   e) urban couples compared to rural couples; and
   f) couples with large age gaps compared to couples of similar ages.

(ii) Very large provincial and sentinel site differences in HIV prevalence; and
(iii) Very large differences in the provincial proportions of all PLHIV of Zambia.

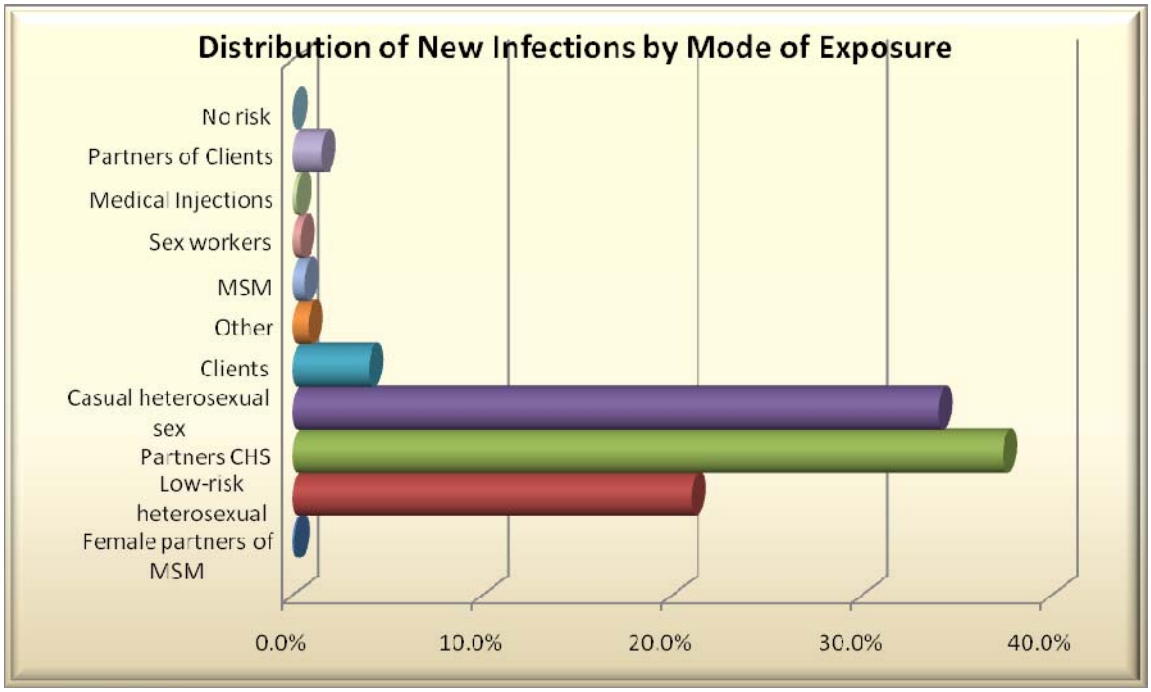
2.1.4 Mode of Transmission of HIV

Heterosexual sex remains the major mode of transmission of HIV in Zambia accounting for 78 per cent of new HIV infections[9]. In the last UNGASS Country Progress Report, Zambia indicated that this mode of transmission is exacerbated by high-risk sexual practices, socio-economic and poverty inequalities between men and women, high prevalence of untreated (ulcerative) STIs and Tuberculosis. However, a recent survey[10] by NAC established that over the period 1992 to 2007 important positive changes have been observed in several behavioural indicators of adults and youth in Zambia. Fewer survey respondents report multiple partners and/or non-cohabiting partners and more report just one (usually married or cohabiting) partner. Condom users have increased as a proportion of the whole population, especially among those married or reporting just one partner in the last year. There are signs that more young people delay sexual debut and remain sexually abstinent for longer periods.

Mother to child transmission accounts for 21 per cent of HIV infections during pregnancy, at birth or while breastfeeding. However, availability and access to Prevention of Mother to Child Transmission (PMTCT) services continue to increase with a number ANC facilities providing HIV testing and counselling for pregnant women and antiretroviral (ART) for PMTCT reaching 939 at the end of 2008[11]. See Figure 2.4.

[9] JMRT 2009 of the NASF 2006-2010, NAC, 2009.
[10] Zambia HIV Prevention Response and Modes of Transmission Analysis, 2009.
[11] Monitoring and Reporting on the Health Sector Response to HIV/AIDS, MoH, 2009.

Figure 2.4: Distribution of new infections by mode of exposure



Source: Joint Mid-Term Review of the NASF 2006-2010, NAC, 2008

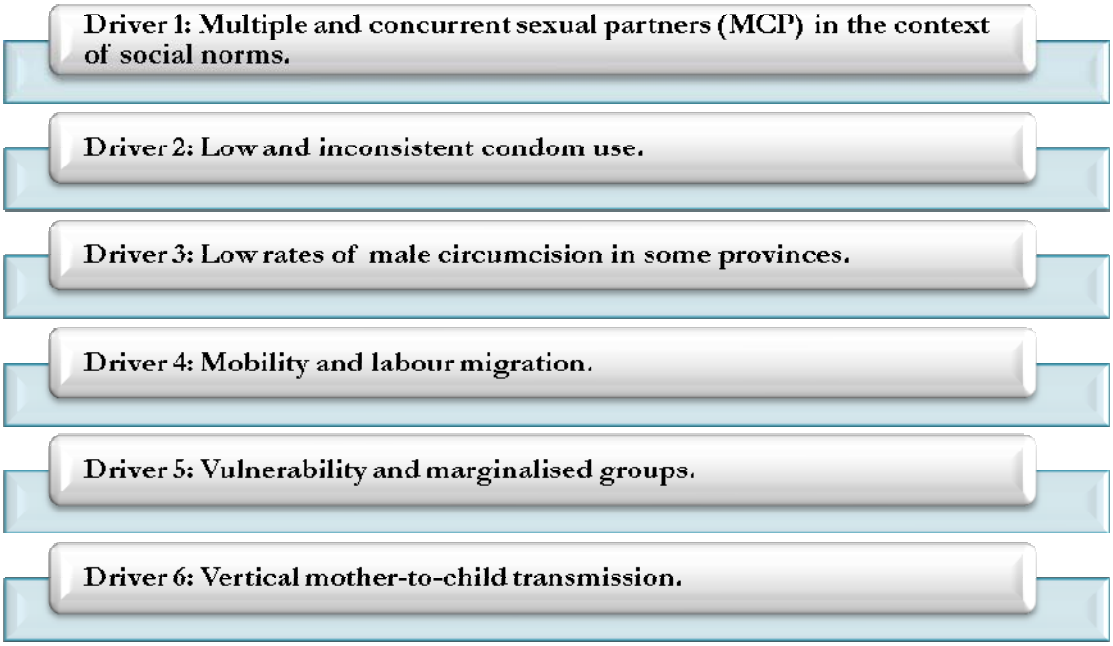
Again with no new available data available, it is still estimated that other modes of transmission account for less that 1 per cent of HIV infections including blood transmission, use of needles and sharp instruments and sex between men.

Further reports show that within the heterosexual mode of transmission, HIV incidence is highest among partners of casual heterosexual sex (37.3 per cent) where condom use is only about 6 per cent. The majority of this group (31 per cent) are females who social-culturally have low capacity to negotiate for safer sex. The second highest incidence is from casual heterosexual sex (34 per cent). HIV prevalence for this group is 24 per cent. They are an 'agent' of infections to their regular partners especially if the sexual acts are not protected. HIV incidence among the low risk heterosexual sex is 21 per cent while that of clients of female sex workers (FSWs) is 4 per cent. Other behaviour risk groups had HIV incidence of less than 1 per cent and as expected there is no infections in the no risk group. Refer to Figure 2.4 on new infections by mode of transmission.

2.1.5 Drivers of the HIV Epidemic in Zambia

Zambia's efforts to know it's own epidemic have been ongoing. In 2009, under the guidance of the Cabinet Committee of Ministers on AIDS, the National HIV and AIDS/TB/STI Council commissioned an Epidemiological Synthesis which drew together fresh evidence on where most of the new HIV infections are occurring in the general population. The evidence showed that the following drivers should be focused on for the next five years:

Figure 2.5: The six drivers of the Zambian HIV epidemic



Source: National HIV Prevention Convention, NAC, 2009

Driver 1: Multiple and concurrent sexual partners (MCP) in the context of social norms

Evidence shows that the bulk of the new infections are coming from causal and concurrent multiple sexual relationships. The target groups for this risk factor are couples, youth, mobile population and men having sex with men (MSM). Intervention in this group is aimed at getting individuals to raise their ability to identify and recognise the risk.

Driver 2: Low and inconsistent condom use

Condom use has not increased enough to impact significantly on HIV transmission. The target group is similar to that group in Driver 1, including vulnerable groups such as prisoners, mobile population, MSM and youths in schools. Intervention aims at ensuring universal access to and use of, condoms by the target groups.

Driver 3: Low rates of male circumcision in some provinces

Male circumcision is not widely practiced in Zambia, except among some ethnic and religious groups. Studies have shown that male circumcision can reduce HIV infections by up to 60 per cent. The target for this intervention is the male population, and, where applicable, their parents. Infant boys and their mothers are a key sector of this group.

Driver 4: Mobility and labour migration

The extent of the problem in Zambia has not been established. What is known is that mobility and migration of workers destabilise steady partnerships, and so facilitates multiple and

concurrent partners and the use of sex workers. The goal is to initiate, revitalise and scale-up innovative HIV prevention programmes for mobile populations.

Driver 5: Vulnerability and marginalised groups

Vulnerability and marginalization of some sub-groups such as commercial sex workers, prisoners, men having sex with men and migrants increase their risk of HIV infection. The goal is to promote right based laws, policies, practices and programmes that reduce risk and vulnerability for these groups.

Driver 6: Vertical mother-to-child transmission

Infections of children under fourteen constitute about 10 per cent of all HIV infections in Zambia. Most of these are a result of mother-to-child transmission. The goal is to provide services for the prevention of mother-to-child transmission to all pregnant women and their partners. These services are to be strengthened through outreach programmes. Intervention is also aimed at enhancing male involvement, including couples counselling.

2.1.6 Estimations of Annual HIV Incidence

According to the JMTR 2009 of the NASF 2006-2010, available evidence show that in Zambia more studies have been conducted on the HIV prevalence than on HIV incidence, this is despite the fact that it is important to understand where new infections are coming from and also distribution of the new infections by risk groups in order to control the HIV epidemic (UNAIDS, 2004 and 2007). Changes in prevalence could lag behind changes in risk. Therefore, a better measure for monitoring the HIV epidemic is incidence (rate of new infections over a specific period of time). If the incidence is known, the report adds that temporal changes in the epidemic can be better identified and characterised and linked to specific risk behaviours over the same time.

A review of the estimates of trends in HIV incidence revealed[12] that HIV incidence in adults aged 15-49 years has halved since 1990 and is estimated to be at a stable level at 1.6 per cent in 2009 (2 per cent in women and 1.2 per cent in men). In 2009, a total of 82,681 adults were estimated to have been newly infected with HIV (59 per cent women, 41 per cent men), which translates into 226 new adult infections per day. Although HIV incidence has stabilised, the absolute number of new HIV infections increases due to Zambia's expanding population. Despite the stabilised HIV incidence, emphasis is on the need to urgently reduce the adult HIV incidence below the current 1.6 per cent. In children aged 0-14 years, the number of new infections has gone down significantly since its peak level of 21,189 in 1996. This according to the report is a combined effect of decreasing incidence in women and introduction of the PMTCT programme. The estimated number of new infections in children in 2009 is 9,196, translating into 25 new infections per day.

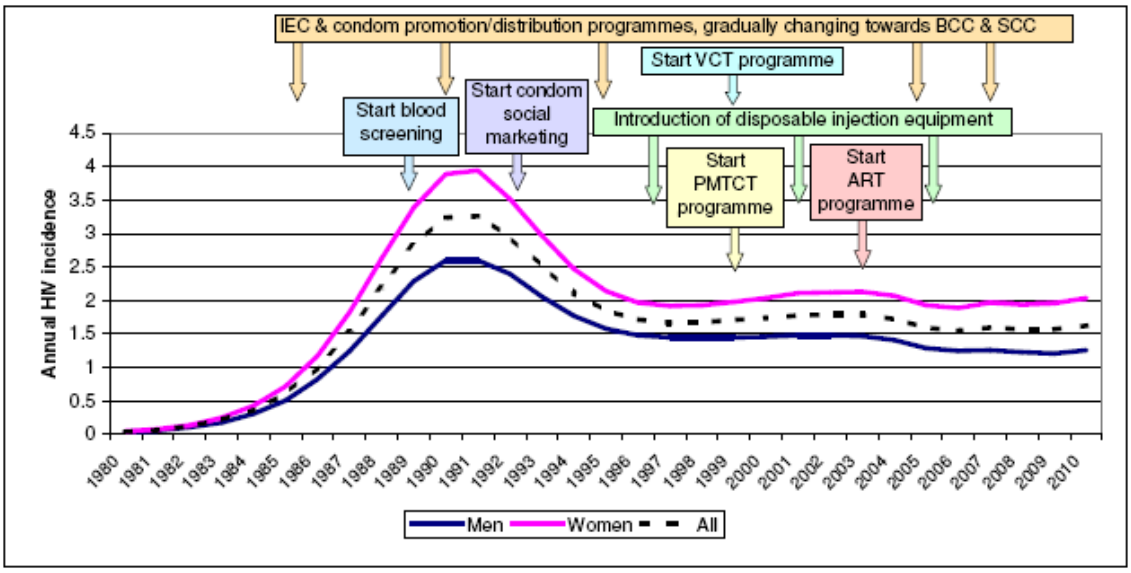
Mathematical models used to estimate HIV incidences established that annual incidence among adults aged 15-49 years is about 1.6 per cent in 2009, having decreased from about 3.3 per cent in 1990/91. Between 1991 and 1995, HIV incidence declined, particularly in women. Some of

[12] Zambia HIV Prevention Response and Modes of Transmission Analysis, 2009.

this decline is due to natural epidemic dynamics, in which those at highest risk of HIV were infected first, leaving a pool of less susceptible individuals (which is constantly diluted by new age cohorts also containing highly susceptible individuals)[13].

HIV incidence is consistently higher in women than in men. For 2009, it is estimated that annual incidence is about 2 per cent in women (pink line, Figure 2.6) and about 1.2 per cent in men (blue line).

Figure 2.5: Estimated annual HIV incidence in adults aged 15-49 years in Zambia (1980-2010)



Source: CSO (2008) - 2008 HIV AND AIDS projections report, table 3.1 for incidence curves. Programme reports for data on programme initiation.

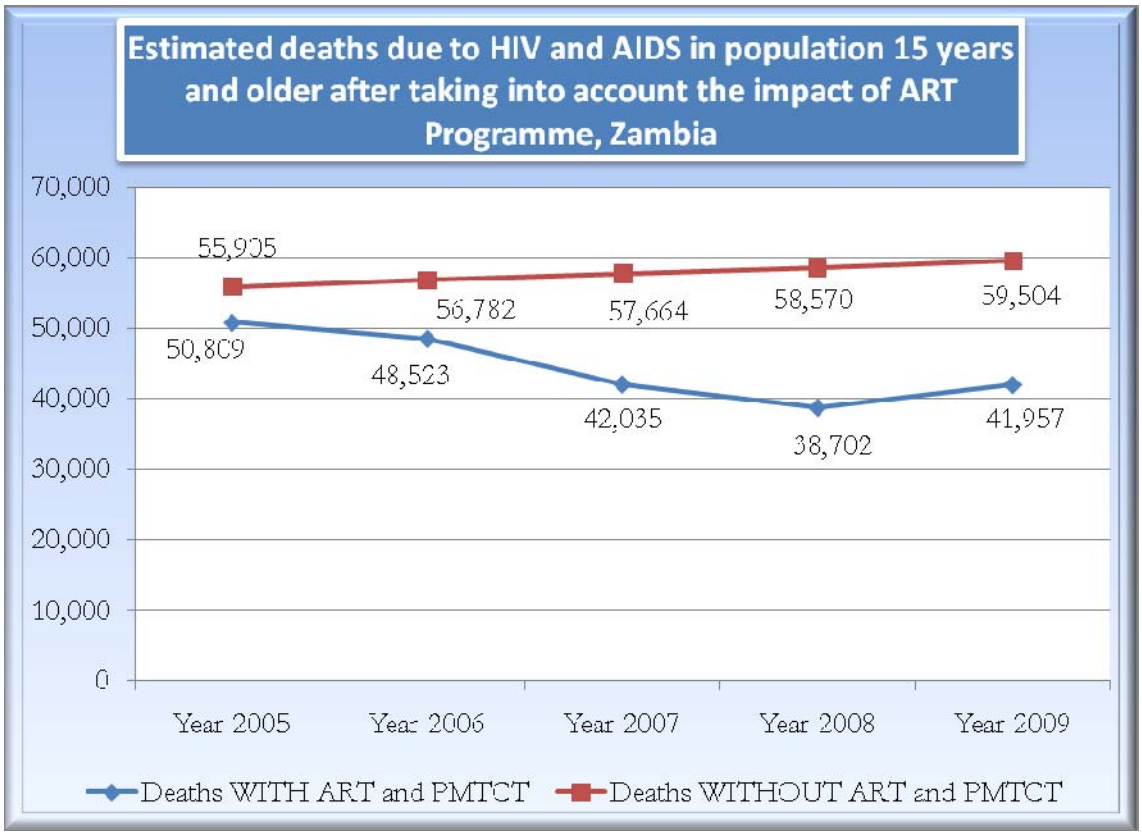
Note: *Direct associations between the modelled HIV incidence and the implemented HIV prevention programmes have not been established.*

Mortality and morbidity rates are high and life expectancy at birth has fallen below the 40's. The total number of deaths due to AIDS peaked in 2003 with 66,272 deaths but in recent years, it has dropped with increasing access to ART[14]. Estimated AIDS-related mortality in children under 14 years also peaked in 2003 (14,681 deaths) and has decreased to about half (7,282 deaths), estimated for 2009[15]. The impact of the treatment programme in averting deaths among the population aged 15 years and older with HIV is very large. In 2009, about 7,661 deaths were averted among the males, 9,886 among the females and 17,547 among the both sexes. It should

[13] Zambia Mode of Transmission Report, NAC, 2009.
[14] Sector Institution Assessment for HIV and AIDS in Zambia, NAC, 2009.
[15] Extracted from Zambia, National Aids Council, National HIV and AIDS Strategic Framework, 2006-2010, May 2006 and The World Bank, The Africa Multi-Country AIDS Programme: Results of the Bank's Response to a Development Crisis, Washington, 2007.

also be noted that due to the treatment programme, the population of 15 years and older with HIV would increase because of the prolonged survival among the infected on treatment[16]. See Figure 2.7.

Figure 2.7: Estimated deaths due to HIV and AIDS in population 15 years and older after taking into account the impact of ART programme, Zambia



Source: 2009 HIV Epidemiological Report, Zambia

By the end of 2008, the adults and children population with advanced HIV infection who were receiving ART was 219,576 and this increased to 277,355 as at end of December 2009.

2.1.7 Special Groups in Zambia

(i) People Living with HIV (PLHIV)

Over 900,000 people are estimated to be living with HIV and AIDS in Zambia, of which nearly 80,000 are the newly infected (MoH/NAC/CSO). In spite of nearly eight per cent of the population living with HIV and AIDS, many challenges exist in ensuring that their human rights are respected and protected and that they have equitable access to goods and services that are available to people not infected with HIV. The following constraints make it difficult for PLHIV to lead a full and meaningful life: stigma and discrimination; inadequate access to ART and other

[16] 2009 HIV Epidemiological Report, Zambia.

treatment; inadequate access to and appropriate reproductive health care services, particularly to address the full range of sexual information and reproductive health needs of young people living with HIV; low involvement of PLHIV in local governance mechanisms for the multi-sectoral response; and exclusion from livelihood and business development services.[17]

Stigma and discrimination affects PLHIV in many areas of their life. A key area is the absence of 'voice' in matters that affect them most. PLHIV are involved in national-level policy development but at a level much below expectation[18]. Stigma and discrimination, lack of capacity by many PLHIVs to effectively participate, and the high centralisation of policy-making functions were identified as inhibiting factors. PLHIV are more likely to be involved in the implementation of programmes rather than in key policy-making forums and, consequently denied voice and influence in decision-making processes.

PLHIVs also have difficulty accessing critical health services, especially for those who live far from major urban areas. Official estimates of the cost of treatment do not include transportation, food, and accommodation for upwards of three or more days. Neither are the personal and replacement cost of absence from work or care-giving or other responsibilities captured by this approach. Presently, these indirect costs are borne by the client or household members. The associated costs of treatment are a factor in PLHIV missing monthly clinical appointments and collection of medication[19].

Universal access to reproductive health services is required to respond to the needs of PLHIV of all ages, and this requires a strategy that promotes the integration of HIV and AIDS with sexual and reproductive health. With the widespread availability of ARVs, Zambia is supporting a generation of children living with HIV who are surviving longer and reaching adolescence and adulthood. Tailored sexual and reproductive health information and services are required for this group.

Although Zambia was one of the first countries to implement GIPA (Greater Involvement of People Living with AIDS) in 1996[20] , operationalisation of the GIPA principle is weak in Zambia and there is need to widen participation structurally and systematically at all levels. PLHIV are often expected to contribute their time and effort without pay, and sometimes without reimbursement for their expenses. Given that Zambia is 25 years into the epidemic and one of the countries most affected, PLHIV have important perspectives and the right to participate fully in decisions affecting them[21].

[17] NZP+ Chapters Representation at District Level, November 2008; and Sexual Reproductive Health and HIV/AIDS Integration Strategy for 2009-2012.
[18] Zambia GIPA Report Card (December 2009).
[19] Report on Access to Medical Services by People Living with HIV and AIDS in Zambia, NZP+ 2009.
[20] R Msiska.
[21] NZP+, 2009.

a) Older Persons and HIV[22]

The impact of HIV and AIDS on older people has been particularly devastating. Prolonged illness and death of adult children is always a tragedy but made worse by the lack of comprehensive social security and pension schemes for older persons. Aged parents and extended kin rely on their children, in particular, and other young relatives for financial and material support. Therefore, the loss of young productive adults exacerbates poverty levels in the country by negatively affecting traditional forms of social security for older people.

Adults and children living with HIV and AIDS are usually assisted by their parents, grandparents and other extended kin. However, the burden of care usually falls on older women because of their knowledge and experience gained from a lifetime of caring for others, availability because of lack of full-time employment, cultural norms that require family members to look after each other, and personal desire to do so based on love and affection. According to HelpAge International, 90 per cent of AIDS care in sub-Saharan Africa is provided at home, often by older women[23].

The cost of care tends to exhaust the limited resources available to older persons and plunge them into absolute destitution. The Zambian public welfare system lacks resources to respond to the magnitude of need. However, the Department of Social Welfare in the Ministry of Community Development and Social Services in a limited manner provides cash transfers and other support to households identified by their community as having the greatest need. Such households tend to be headed by older single women.

Whilst data on the impact of HIV and AIDS on children and adults below 49 years is available, disaggregated information by age cohorts is not available to show the full impact on older persons. Most available information is anecdotal, collected for other purposes such as to monitor the impact of public social assistance schemes. The lack of accurate and current data on the situation of older people and HIV and AIDS has led to neglect and failure to fully respond to their needs. There is need for a systematic approach to meeting the needs of older people in the context of HIV and AIDS programming.

(ii) Orphans and Vulnerable Children

HIV and AIDS account for half of the estimated 1.3 million orphans and vulnerable children in Zambia. Urban children (27 per cent) were more likely to be orphaned or vulnerable than rural children (16 per cent). At the provincial level, North-Western (11 per cent) has the lowest proportion of children orphaned and vulnerable and Lusaka (29 per cent) the highest). However, given that 67 per cent of children are being brought up in poverty[24], the majority of children can be classified as OVC.

[22] The UN defines an older person as anyone over 60 years (*Older People and HIV/AIDS in Africa,* May 2009).
[23] HelpAge International *Regional Consultative Meeting Report on HIV and AIDS Prevention and Treatment for Older Persons,* September 2008.

Since the death of a parent from AIDS often results in the death of the surviving parent, approximately 19 per cent of OVC are double orphans. Double orphans are particularly vulnerable and are less likely to be in school compared to other children who have at least one parent alive (ZDHS, 2008-2009). Most orphans are cared for by aged grandparents or siblings and of the latter, child-headed households are included[25].

Much of the burden of HIV and AIDS falls heavily on families and communities, especially women and the elderly who take responsibility for most of the care and psychosocial support at household level. Only 19.1 per cent of rural and 11.6 per cent of urban OVC reported receiving external basic assistance, e.g. from sources outside of the household and kinship network. The support is provided by government, CSOs, FBOs, and international organisations. As part of the government commitment to mitigate the socio-economic impact of HIV and AIDS, the Public Welfare Assistance Scheme was mandated to provide social protection to orphans. Access to cash transfer funds targeting OVCs in some districts in the country has led to improved lives and community willingness to take care of the OVCs. This type of support helps to alleviate psychosocial stress in households, particularly households headed by elderly women by enabling them to provide for the basic needs of the children in their care[26].

Zambia's commitment to the survival, well-being and development of children is articulated in ratification of international agreements and national policies, plans, and programmes such as the Convention on the Rights of the Child, National Child Policy, and National Programme of Action (NPA). The National Child Policy addresses the needs of all children and not just OVC. .

The Ministry of Sports, Youth and Child Development (MSYCD) and the Ministry of Community Development and Social Services (MCDSS) are the two key government ministries for OVC support in Zambia. The two ministries complement the OVC support with the MSYCD responsible for legal issues pertaining to protection of rights of children and MCDSS supporting delivery of basic social services.

Coordination and decentralisation of the national response to OVC are critical to the effectiveness and efficiency of interventions. All District AIDS Task Forces (DATFs) and District Welfare Assistance Committees (DWACs) have had training on OVC issues. A Parliamentary Caucus on Children has been established and endorsed by the Speaker of the National Assembly. In 2009 the Parliamentary Caucus Working Group began developing work plans, sourcing for funding for a coordinator, and designing a pilot project to integrate issues of children into constituency development plans.

The OVC situation appears to be developing into a deepening crisis as funding and programming is failing to keep pace with the magnitude of orphans who need care and support. Female-headed households are less able to cater for the needs of orphans than other sub-population groups. The issue of sustainability for community based programmes still remains a

[25] UNICEF, *Zambia Situation Analysis of Children and Women 2008*.
[26] HelpAge International *Salt, Soap and Shoes for School,* an Evaluation Summary, 2008.

challenge. There is a marked bias favouring urban areas in delivery of services for OVCs because of the physical location of the majority of public, private, and civil society organisations in these areas.

2.2 Policy and Management

2.2.1 Policy and Legal Framework

Zambia is signatory to a number of global and regional agreements and declarations including the Millennium Development Goals, the Paris Declaration, UNGASS Declaration, Universal Access, Abuja Declaration, African Union Maseru/Maputo Declaration, and SADC Protocols. At country level, legal and policy frameworks have been developed. These include the National HIV and AIDS/STD/TB Act (2002), National Decentralisation Policy (2002), National HIV and AIDS/STI/TB Policy (2005), National HIV and AIDS Strategic Framework (2006-2010), Fifth National Development Plan (2006-2010), Population Policy (2007), Reproductive Health Policy (2008), and the Zambia Decent Work Country Programme (ZDWCP) 2007-2011.

Important instruments against discrimination and protection of human rights are: Constitution of Zambia (1991), Persons with Disabilities Act No 33 of 1996, National Education Policy (1996), National Gender Policy (2000), National Cultural Policy (2003), Youth Policy, National Agricultural Policy (2004), Citizens Economic Empowerment Act (2006), National Child Policy (2006), Sexual Offences & Gender Violence Bill, Employment Act (draft) and Lands Policy (draft). Furthermore, implementers of biomedical interventions (PMTCT, CT, PEP, STI treatment, ART, blood safety, injection safety, universal precautions), are provided with regularly updated strategies and guidelines to standardise the quality of interventions.

In spite of the above, there are laws that present obstacles to effective HIV prevention, treatment, care and support for vulnerable population sub-groups, notably the laws on homosexuality, prostitution and intravenous drug use (IDU). Currently, there is no legislation that overtly bans discrimination based on actual or perceived HIV status.

2.2.2 Strategic Outcomes

The national response is multi-sectoral and designed in line with the '3 Ones Principle', which requires one national AIDS strategic framework, one national coordinating body and one monitoring and evaluation (M&E) system. Most of the relevant institutional arrangements required for a multi-sectoral national AIDS response are in place.

2.2.3 Coordination and Management of the Response

The national response is based on the principle that HIV and AIDS is a cross-cutting issue and requires multi-faceted and multi-dimensional interventions. Therefore, decentralisation and mainstreaming of HIV and AIDS are thematic issues in the FNDP and 2006-2010 NASF. In the 2006-2010 NASF significant focus was placed on building the capacity of district, provincial and national planning mechanisms in multi-sectoral HIV and AIDS planning, monitoring and coordination, mainstreaming HIV and AIDS into private, public and civil society sector, development policies, strategies, plan and budget; and developing and implementing comprehensive workplace interventions.

Stakeholder capacity development initiatives in HIV and AIDS have in the past focused much on development of competencies in individuals to perform specific HIV and AIDS functions that were needed in their institutions with the assumption that institutional collective capabilities will also develop. The predominant method was through the various kinds of training. However, with high attrition in most partner institutions, this approach has not necessarily been able to produce the capacity of the institutions to change. Hence, NAC and AMICALL have moved towards capacitating the institution rather than individuals.

In support of HIV and AIDS mainstreaming, the following activities have been undertaken with the following results: 98 per cent of line ministries have established HIV and AIDS workplace policies and action plans; 85 per cent of private sector companies have workplace polices; NAC collaborated with local authorities and civil society organisations to mainstream HIV and AIDS into the local government system; and provide technical assistance for HIV-related institutional capacity building for 500 local lead sectors organisations. Dissemination and implementation at all levels, and especially at sub-national and community levels is a significant challenge[27].

The national response has been dealing with the issues of governance, poverty, gender, economic, socio-cultural, legal, sexual violence and physiological factors that are different for men and women in addressing the HIV and AIDS epidemic. Gender and HIV and AIDS have been mainstreamed in most areas as evidenced by the sectors in the FNDP. However, the rate of implementation of these policies is slow. Most of the structures mandated to mainstream gender are inadequately resourced and have limited analytical skills and techniques in gender and thus remain weak and unable to implement gender policies and plans adequately. This has hampered the effectiveness of implementing the National Gender Policy (NGP). Furthermore, although most workplace policies on HIV and AIDS have been development, very few of them are gender responsive due to weak linkages between gender and HIV and AIDS. There is acknowledgment that gender is a critical element in the HIV and AIDS response, the gender dimension and links to human rights remain challenges in most of the interventions in the framework. Most of the thematic areas, the objectives and their strategic interventions have been expressed in a gender neutral language. They have been developed on the premise that women and men's concerns have been taken care of, rendering it difficult to develop gender responsive intervention strategies.

However, inequality and power imbalance between women/girls and men/boys heightens the vulnerability of females to infection. Certain cultural and traditional practices have been identified as some of the factors contributing to the risk of HIV transmission by contributing to the subordination of women. The practice of widow inheritance and sexual cleansing after the death of a spouse has been identified as a potential source of HIV transmission. The culture of silence that characterises sexual matters is a big challenge, especially to women (NAC, 2004).

Other gender related factors affecting response include: low economic and political status of women, poverty, limited decision-making powers; limited skills or power to negotiate safe sex;

[27] Joint Mid-Term Review, NAC 2008.

prostitution, unprotected sex, early marriages; concurrent and multiple sexual relations especially among men; inter-generational sex; peer pressure and alcohol consumption; sexual exploitation of young girls and women and human trafficking (National HIV and AIDS/STI/TB Council, 2004). Others include multiple concurrent sexual partners, cross-generational sex, transactional sex, polygamy, dry sex, the traditional practice of sexual cleansing and some practices during initiation ceremonies facilitate the transmission of HIV. Sexual violence is the worst manifestation of gender power imbalance that particularly exposes women and girls to HIV infection. Forced sex is a highly undesirable behaviour in any circumstance, and is particularly risky in the context of the HIV and AIDS epidemic.

Strides have been made in developing policy on MC increasing numbers of males seeking circumcision. However, while male circumcision reduces the risk of HIV acquisition by about 60 per cent, only 15 per cent of Zambian males are circumcised; the ZSBS (2009) findings suggest that women prefer circumcised men. High population mobility, mainly for trade and employment purposes, has been shown to increase vulnerability to HIV. Sites such as border areas and transport corridors are difficult to address, but are considered important 'hot spots' where innovative approaches are needed. Other marginalised or stigmatised sub-populations are also at risk because they are often living outside of, or not accepted by, mainstream society. Carefully targeted approaches for these groups are required.

(i) Decentralisation and Community Response

The goal of community response in HIV and AIDS is to contribute to the reduction of the transmission of HIV and mitigate the socio economic impact of HIV and AIDS in Zambia by working in communities to mobilise them and strengthen their capacities to respond to the epidemic in Zambia.

Local authorities play a critical role in programme planning of HIV and AIDS activities into district development plans. Plan development is guided by the Decentralisation Policy and the Ministry of Finance and National Planning District Planning and Budgeting Manual, of which the latter is used to plan expenditure allocation at all levels. Sixteen local authorities out of 72 have been capacitated covering councilors and council staff on how to deal with HIV and AIDS, internally in their workplaces and externally in their communities. Training materials on local government and HIV and AIDS, mainstreaming, participatory planning, and gender and human rights mainstreaming have been developed. A typical local government training programme produces a district HIV and AIDS directory and a local authority workplace policy.

However, coordination of efforts at the sub-national level requires a systematic approach to harmonising and building local capacity to manage and sustain a comprehensive response to the epidemic and a more conducive enabling environment for community-based initiatives. Support for strengthening coordinated sub-national HIV and AIDS structures, planning and implementation processes is weak. A number of stakeholders have established parallel structures at the community level and this makes it difficult for local authorities to provide adequate coordination in communities. The linkage between district health management teams, district

AIDS task forces, and local authorities (councils) is weak. This leads to ineffectiveness, inefficiency, lack of transparency, and lack of accountability.

Strengthened capacity of districts would enable more effective management, coordination, and monitoring of the multi-sectoral response, and mainstreaming in public and private sectors, civil society and faith-based organisations. There is also need to improve communication between various stakeholders at sub-national level. This would require strengthening DATFs to facilitate this process.

Progress in mainstreaming HIV and AIDS has improved but continues to be uneven. Similarly, improvements in evidence-based decision-making and distribution of human and financial resources will significantly influence the success of the AIDS response.

(ii) Institutional Arrangements

The institutional arrangement for the national HIV and AIDS response is made up of various actors and organisations, consisting of the public and private sectors, civil society, faith-based organisations, and cooperating partners. These various entities are organised into self-coordinating groups or platforms or forums that represent key constituencies such as public service employees, persons living with HIV and AIDS, the youth, people with disabilities, and other special interest groups. The National HIV and AIDS/STI/TB Policy (2002), current National HIV and AIDS Strategic Framework and National HIV and AIDS Operational Plan provide guidance and direction to harmonising multiple actors and multiple interests into a cohesive and focused national response.

A high level, Cabinet Committee of Ministers on HIV and AIDS (established in 2000) works closely with MoH and NAC to provide policy direction, supervision and monitoring of the implementation of HIV and AIDS programmes, particularly in the public sector. NAC (established as a statutory corporation through an Act of Parliament in 2002) functions as the sole national AIDS coordinating authority.

NAC is a semi-autonomous statutory body administratively situated in the MoH, and the MoH Minister chairs the Cabinet Committee on HIV and AIDS, which appoints the NAC Board Chairman and supervises Council activities. The MoH's Permanent Secretary is the Controlling Officer for NAC's income and expenditures, and the Minister represents NAC in Parliament when the national budget is approved.

Theme groups provide technical expertise on the various aspects of the HIV and AIDS response. Membership in the theme groups is drawn from sectoral institutions based on mandates, interests and technical expertise. Under the 2006-2010 NASF, six theme groups operate: namely, Prevention; Treatment, Care and Support; Impact Mitigation; Decentralisation and Mainstreaming; Monitoring and Evaluation; and Advocacy and Coordination. However, theme groups are structured according to the existing NASF; consequently, they are likely to change in the 2011-2015 NASF.

The National HIV and AIDS/STI/TB Council (NAC) is mandated to coordinate, monitor and evaluate inputs, activities, outputs and impacts of HIV and AIDS programmes in Zambia. Within the context of decentralisation, the National HIV and AIDS Council has outlined a strategy for support to decentralised coordination, monitoring and evaluation at provincial and district levels. NAC communicates within the context of the existing institutional framework of provincial development coordinating committees (PDCCs) and district development coordinating committees (DDCCs). The weak link between NAC and decentralised structures and the inherent weaknesses of the PDCCs and DDCCs have reduced the effectiveness of the HIV and AIDS response at the local level.

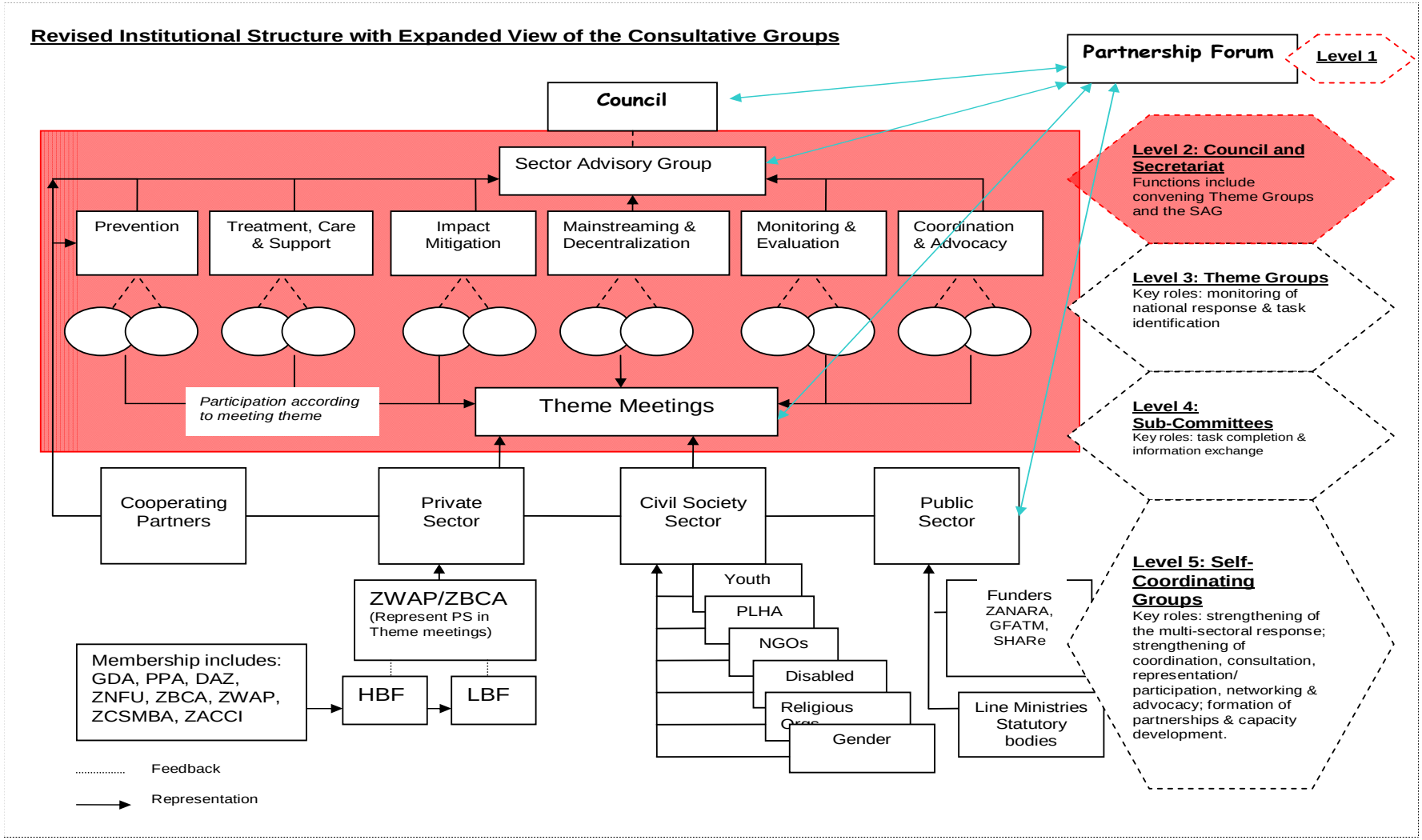
Civil society, private sector, and faith-based organisations develop their own strategic plans and mobilise resources to support ensuing programmes and activities. They are encouraged to align their work plans with the national framework and participate in the national monitoring and evaluation system. Cooperating partners in conjunction with all stakeholders support the national response through coordinated strategic and operational plans. NAC convenes quarterly meetings with the cooperating partners, CSO, private sector, and FBO self-coordinating groups/forums to facilitate partnership building, consultation, participation, and information exchange.

The Partnership Forum provides a high level formal and representative forum for all partners: government, private sector, cooperating partners, civil society, international NGOs, PLHIV, and organisations involved in the decentralised response to support the national response to HIV and AIDS. The Partnership Forum provides a platform for information sharing, technical leadership, and direction. It promotes transparency and accountability in the utilisation of all resources earmarked for HIV and AIDS. The Partnership Forum meets once a year, and is co-chaired by the Chairman of the Cabinet Committee of Ministers on HIV and AIDS and the UN Resident Coordinator. It is envisaged that government leadership in the Partnership Forum will continue whilst cooperating partners explore better methods of working together to support the national response.

Under the Ministry of Finance and National Planning, Sector Advisory Groups (SAGs) have been formed to provide technical support to the preparation of National Development Plans. Under the FNDP, a SAG was established for gender and HIV and AIDS. Since the completion of the FNDP, gender and HIV and AIDS have been separated, and an HIV and AIDS SAG established to provide the NAC Secretariat with programmatic information that will inform deliberations of the Council Committees, and to prepare the HIV and AIDS Chapter in the SNDP. Membership of the SAG includes Chairpersons of the theme groups, self-coordinating groups, PACAs, selected council committee members, cooperating partners, and other selected advisors and stakeholders.

The NAC Secretariat convenes meetings of the SAG on a twice-yearly basis (in advance of meetings of the Committees of the Council). The purpose of the SAG meetings is to provide the Secretariat with programmatic information that will inform the deliberations of the council committees. Membership of the SAG includes the Chairpersons of the theme groups and SCGs, PACAs, selected Council Committee members, as well as other selected technical advisers and stakeholders. Figure 2.8 illustrates the revised institutional structure the response.

Figure 2-6: Revised Institutional Structure with Expanded View of the Consultative Groups



Chapter 3 NATIONAL RESPONSE TO THE AIDS EPIDEMIC

3.1 Introduction

This section reflects the change made in national commitment and programme implementation broken down by prevention, treatment, care and support, knowledge and behaviour change, and impact alleviation during the period January 2008–December 2009.

The section specifically addresses the linkages between the existing policy environment, implementation of HIV programmes, verifiable behaviour change and HIV prevalence as supported by the UNGASS and UA indicator data. Where relevant, these data have also been presented and analysed by geographic, sex and age groups (15–19, 20–24, 25–49) dynamics.

The financial data entered in the National Funding Matrix reflect actual expenditures, not budgets or commitments. They also include AIDS expenditures that were made as part of broader systems of service provision. Given the nature of the expanded responses to AIDS, the AIDS expenditures include those that might occur outside the health system. An appendix of the Completed National Funding Matrix will provide a more detailed picture of the situation at the country level, which is useful for both national and global decision-making. Zambia has employed the National AIDS Spending Assessments (NASA) as a tool to monitor the flows of AIDS funding and first reported using this methodology during the last reporting period. The National HIV and AIDS Spending Assessment (NASA) is a comprehensive and systematic methodology used to track and determine the flow of resources intended to combat HIV and AIDS. It tracks the actual expenditures of resources from their origin (sources) down to the end point of service delivery (beneficiary populations), among the different institutions dedicated in the fight against the disease. The last AIDS Spending Assessment Survey was conducted in 2007 and provided indicators for AIDS spending for the period 2005 and 2006. A study has since been commissioned and is underway to update these indicators for 2007 and 2008.

The National Composite Policy Index data has been used to describe progress made in policy/strategy development and implementation, and include a trend analysis on the key NCPI data since 2003, where available. Further, additional data has been included to support the analysis and interpretation of the UNGASS data.

3.2 National Commitments and Action Indicators

3.2.1 National AIDS Spending by Category and Financing Sources

As the national and international response to AIDS continues to scale up, it is increasingly important to accurately track in detail: (i) how funds are spent at the national level and (ii) where the funds originate from. The data is used to measure national commitment and action, which is an important component of the *UNGASS Declaration of Commitment on HIV and AIDS*. In addition, the data helps national-level decision-makers monitor the scope and effectiveness of their programmes. This piece of strategic information supports the coordination role of the National AIDS Council in Zambia and provides the basis for resource allocation and improved strategic planning processes. This indicator sets out to assess progress

in domestic and international AIDS spending by categories and financing sources. Further, it aims to collect accurate and consistent data on how funds are spent at the national level and where those funds are sourced.

With no new available data for AIDS spending since the last reporting period, the same indicators as reported previously remain as the proxy for AIDS spending assessment for the current reporting period.

Table 3-1: HIV and AIDS spending by category and source

	Domestic	International	Total	Domestic	International	Total
Prevention	10,456,573	28,887,905	39,344,478	5,842,093	48,319,341	54,161,434
Treatment, Care and Support	27,860,393	22,923,711	50,784,104	31,904,428	76,908,129	108,812,557
Mitigation and Social protection	1,986,467	25,387,728	27,374,195	1,356,497	7,704,395	9,060,892
Advocacy and Coordination	4,494,130	8,833,371	13,327,501	2,201,255	13,092,653	15,293,908
Mainstreaming and Decentralisation	49,955	2,389,928	2,439,883	3,138,593	526,364	3,664,957
Monitoring Evaluation and Research	443,985	6,852,818	7,296,803	4,041,950	12,872,347	16,914,297
TOTAL	**45,291,503**	**95,275,461**	**140,566,964**	**48,484,816**	**159,423,229**	**207,908,045**

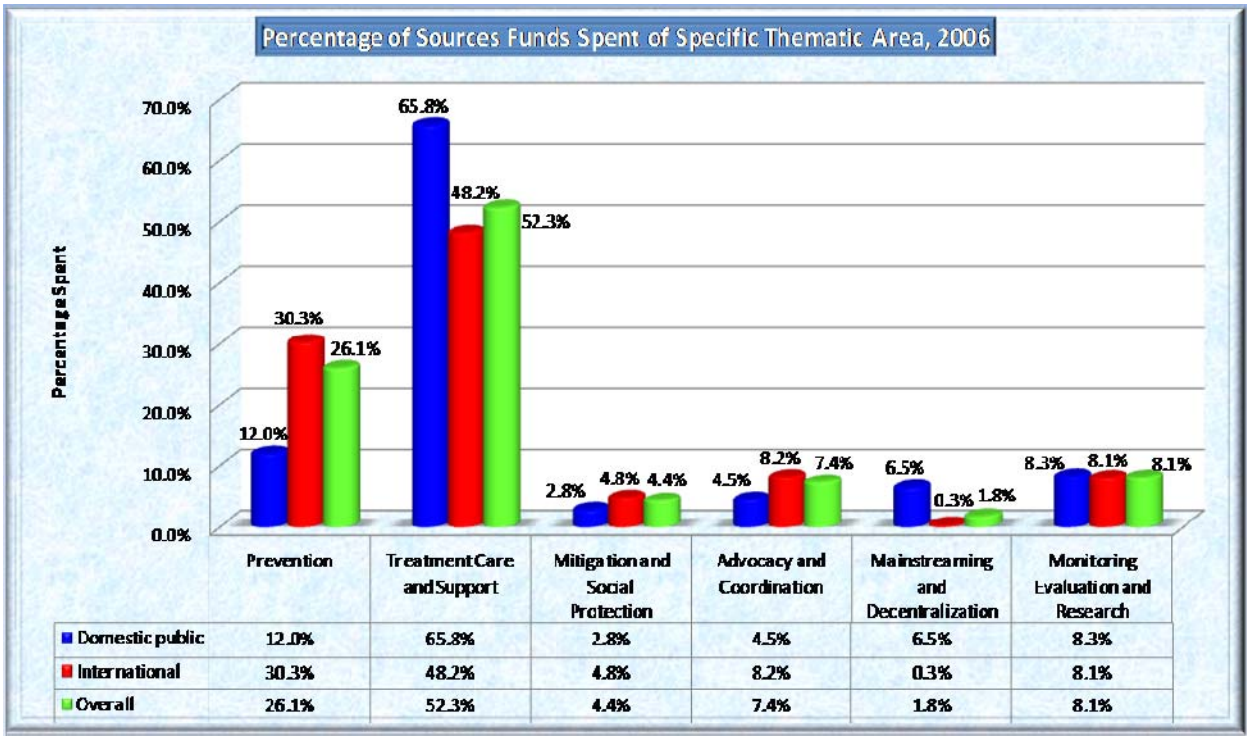
Data Source: National AIDS Spending Assessment Report, 2007

(i) Overall Spending and Sources of Funds

In 2006 when the last National HIV and AIDS Spending Assessment was undertaken, Zambia had increased AIDS spending by 48 per cent, from US$140,566,964 in 2005 to US$207,908,045 in 2006. Despite this rapid escalation in HIV and AIDS funds or perhaps because of it, it has become increasingly challenging to track sources of funding and spending patterns across the multiple public and non-government stakeholders.

Actual expenditure on AIDS is aligned to the six thematic areas of the National Strategic Framework for the period 2006-2010, a successor to the Strategic Intervention Plan of 2002-2005. Figure 3.1 illustrates the percentage expenditure of each source of funding on specific thematic area.

Figure 3.1: Distribution of AIDS expenditure by thematic area and financing sources, 2006

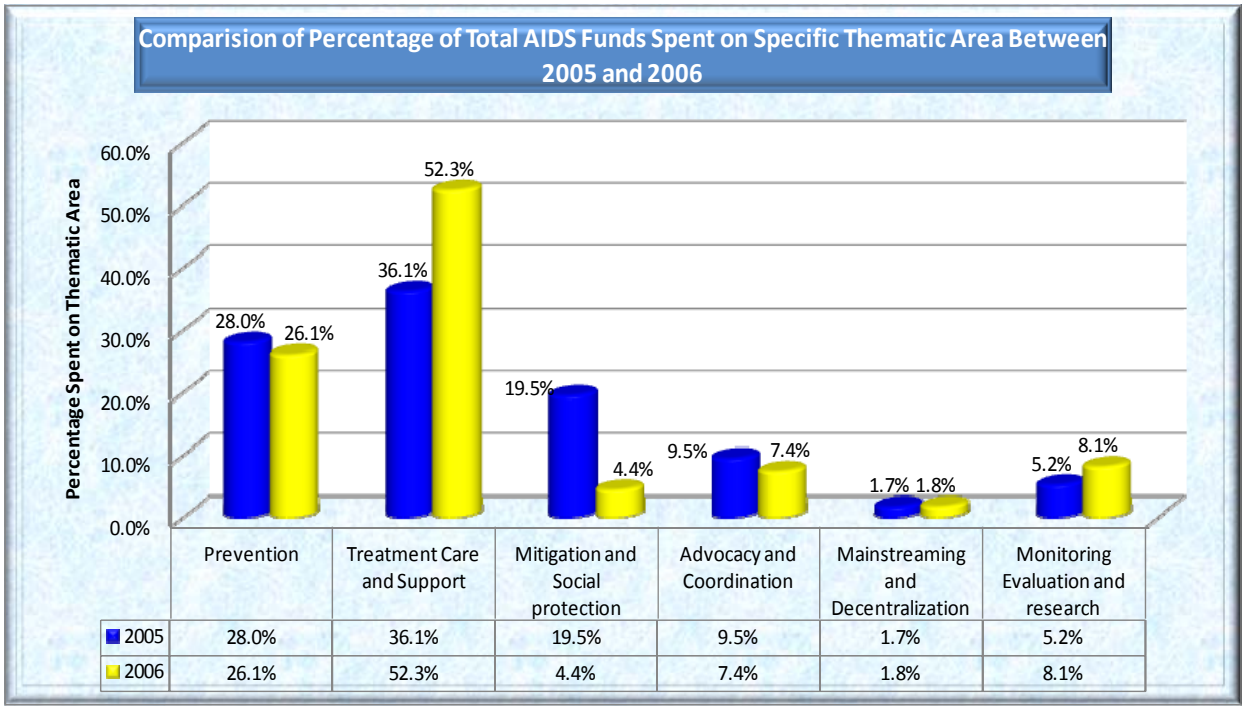


Source: National AIDS Spending Assessment Tool, 2006.

For the fiscal year January to December 2006, domestic public sources of funding accounted 23.3 per cent or US$48,484,816 of the total actual AIDS spending of US$207,908,045, while international sources (comprising the local NGOs, bilateral, multilateral partners and other international NGOs) accounted for the remaining US$159,432,229 or 76.6 per cent.

The combined expenditure on treatment, care and support activities, together with prevention programme accounted for 78.4 per cent of the total national spending for 2006 revealing an increase from the 64.1 per cent in 2005. However, while mitigation and social protection in 2005 accounted for 19.5 per cent in 2005, this dropped to only 4.4 per cent in 2006. The thematic area that received the least spending was mainstreaming and decentralisation for both periods under review scoring only US$3,664,057 or 1.8 per cent in 2006 and, therefore, a slight increase from the 1.7 per cent of US$2,439,883 spent on the same category in 2005. While almost the whole expenditure towards mainstreaming and decentralisation was sourced from international sources in 2005, accounting for 98.0 per cent with domestic sources contributing only 2.0 per cent, a near reversal of the funding pattern occurred in 2006 where public funds was accounting for 85.6 per cent while the remaining 14.4 per cent was financed from international sources.

Figure 3.2: Comparison of percentage of spending of the total expenditure on each theme between 2005 and 2006



Source: National AIDS Spending Assessment Report, 2005 and 2006

i. External Sources of Funding and Allocations

External funding was dominated by three main sources, the Global Fund to Fight HIV and AIDS, Tuberculosis and Malaria (GFATM), the World Bank Multi-country AIDS Programme (MAP), and the US government through the President's Emergency Plan for AIDS Relief (PEPFAR). Principal recipients of the GFATM funding in 2005 and 2006 were the Ministry of Health (MoH), Churches Association of Zambia (CHAZ), Zambia National AIDS Network (ZNAN) and the Ministry of Finance and National Planning (MoFNP).

3.2.2 National Composite Policy Index

The purpose of the *National Composite Policy Index* (NCPI) is to assess progress in the development and implementation of national-level HIV and AIDS policies, strategies and laws. The NCPI reflects the overall policy, strategy, legal and programme implementation environment in the country.

Data Collection

A standard NCPI questionnaire was administered to government officials, representatives of civil society organisations, bilateral and multilateral agencies. These were selected in line with the UNGASS guidelines and on the basis of their being in a better position to provide information on the NCPI key sections consisting of *Strategic Plan, Political Support, Prevention, Treatment, Care and Support, Monitoring and Evaluation, Human Rights, Civil Society Participation* and *Monitoring and Evaluation.*

Information on strategic plan, political support and monitoring and evaluation was exclusively sourced from representatives of public institutions including line ministries and the *National AIDS Council* at national, provincial and district levels. Civil society organisations and cooperating partners addressed the sections on human rights and civil society organisations. On human rights, however, the *Ministry of Justice* and the *Human Rights Commission* were also consulted in line with the UNGASS Guidelines and the *Zambia Police* was also included for further insight into the issue. For prevention and treatment, care and support, the public sector as well as the civil society and cooperating partners answered the sections owing to the overlapping nature of the questions. Twenty-one government institutions and 20 civil society organisations, bilateral and multilateral agencies were included in the study (Annex I).

Table 3-2: Study sample size

SECTION	10	11
Political Support	10	10
Monitoring and Evaluation	10	14
Human Rights	10	9
Civil Society Participation	10	10
Prevention	20	32
Treatment Care and Support	20	22
Total	90	108

Data collection also involved a desk review of policy, strategy and legal documents for which information was used to validate part of the data resulting from the key informant interviews. The NCPI findings were also subjected to two validation exercises involving key stakeholders (Annex II). The resulting validated responses are in Annex III.

Data Analysis and Interpretation

Data analysis was achieved with the aid of the statistical software, the *Statistical Package for Social Sciences (SPSS).* Data was coded, entered, cleaned and ultimately frequencies and descriptive statistics were generated. Data was analysed for each NCPI section and cross comparisons between overlapping variables were also conducted.

For interpretation, the UNGASS guidelines emphasised on the need for involvement of various key stakeholders in the HIV and AIDS response to utilise the data in taking stock of progress made and to discuss what still needs to be done to support an effective and efficient HIV in-country response. This was achieved through the presentation, discussion and validation of the NCPI findings with key stakeholders. The National AIDS Council organised three meetings with stakeholders during which the findings were presented, discussed and validated.

Study Limitation and Challenges

(i) *Absence of sampling frame:* A list of organisations with the potential to provide the relevant NCPI information was not made available. The UNGASS Guidelines recommends

that an initial workshop should be conducted with key stakeholders to among other things agree on the National Composite Policy Index data gathering process including relevant documents for desk review, organisational representatives to be interviewed, process to be used for determining final responses etc.

(ii) *Timing of the study:* Whereas the UNGASS Guidelines advises the completion of the NCPI in the last 6 months of the reporting period i.e. between June and December 2009 for the 2010 reporting round, modalities for the data collection process were only put in place in December. Considering that it was during the festive season, issues of data collection logistics and availability of the targeted key informants became a challenge with data collection only effectively commencing mid January 2010.

(iii) *Study Instrument:* Some questions in the questionnaire could not easily be localised as they emphasised on issues that the respondents considered non applicable to the country context. For example, the issue of MSM and IDU was met with 'resistance.' The validity of the data collection tool was also questioned as measurement is based on personal perception such as on ranking questions.

Strategic Plan

The policy rating for strategic planning has gone down by 1 point and averaged 7 out of 10 for 2009. This is despite the continued activity in the area of policy development which saw the development of the National Strategy for the Prevention of HIV and AIDS/STIs (2009) as well as the execution of the *Joint Mid-Term Review of the National HIV Strategic Plan* held in 2008 with the involvement of key stakeholders.

Table 3-3: Strategy planning efforts in the HIV and AIDS programmes

Policy Area	2005 Rating	2007 Rating	2009 Rating
Strategy planning efforts in the HIV and AIDS programmes	6	8	7

Existence of Multi-sectoral Strategy

Zambia has developed a national multi-sectoral strategy i.e. the *National HIV and AIDS Strategic Framework* covering the period 2006-2010. The country has had a multi-sectoral strategy for over eight years. Various sectors are included in the strategy including health, education, labour, transportation, the military, women and young people. The strategy also details the required resources, estimated funding and sources and allocation of estimated funding by theme for the period 2006-2010. However, the earmarked budgets do not go beyond the strategic themes with line ministries expected to come up with sector budgets.

Target Populations, Settings and Issues

The multi-sectoral strategy addresses key target populations including women, sex workers, OVCs; settings including workplace and schools and cross-cutting issues comprising of poverty, human rights and stigma and discrimination. However, on men having sex with men,

the multi-sectoral strategy does not openly address this target group even though it makes mention of the role that prison confinement plays in increasing the vulnerability to HIV due to frequent unprotected sex within the confines of the prison. (NASF, p. 14). Furthermore and

within the *National Strategy for the Prevention of HIV/STI 2009* are strategies for reaching out to MSM which include behaviour change communication, distribution of commodities such as condoms and provision of necessary services. Both the NASF and the *National Strategy for the Prevention of HIV/STI 2009* also emphasise on the need to address intravenous drug use in relation to HIV and AIDS and identify core strategies for addressing risks associated with IDU.

The strategy also identifies target populations for HIV and AIDS programmes to include men, women, pregnant women, commercial sex workers, poor women, PLHIV, youths, OVCs, migrant/mobile populations, health care providers, care givers and families of people living with AIDS, traditional healers, intravenous drug users, employees, prisoners and the general population. These were identified through various mechanisms and the strategy makes reference to data from:

(i) Central Statistics Office Epidemiological Projections, 2005;
(ii) Zambia Sexual Behaviour Survey, 2005;
(iii) CDC Model (with specific reference to discordant couples);
(iv) The HIV/AIDS Epidemic in Zambia, NAC 2004;
(v) Zambia Demographic Health Survey, 2001/2002; and
(vi) Living Condition Monitoring Survey, 2002/2003.

Operational Plan

The strategy also includes an operational plan with clearly defined programme goals falling within six programmatic themes of intensifying prevention; expanding treatment, care, support; mitigating socio-economic impact; strengthening decentralised response and mainstreaming, improving monitoring and integrating advocacy and coordination. The strategy also has detailed costs for each thematic programmatic area, an indication of funding sources and a monitoring and evaluation framework. However, the strategy does not present clear targets and/or milestones for all indicators as targets are clearly missing for indicators such as the number of VCT, PMTCT and ART sites, number of condoms and IEC materials required per year and per province, number of peer educators trained and others. The *Joint Mid-Term Review* of the NASF (2009) also pointed out this irregularity and stressed the need to redress.

Civil Society and Development of Strategy

The development of the multi-sectoral strategy involved the active to moderate participation of civil society. The strategy was developed through a participatory and consultative process involving significant contribution and support from among others, NGOs, CBOs, FBOs, trade unions, the media, traditional healers and youth organisations. This view was presented by both government and the civil society organisations who rated the extent to which civil society representatives were involved in the planning and budgeting process for the *National Strategic Plan* on HIV at 3.75 out of the total score of five.

Strategy and National Development Plans

The National HIV and AIDS Strategic Framework (2006-2010) has been mainstreamed into the *Fifth National Development Plan (2006-2010), Poverty Reduction Strategy* and *Sector-wide approach*

and representatives of government institutions were in agreement on this. Key HIV related areas included in the *Fifth National Development Plan* include HIV prevention, OIs treatment, antiretroviral treatment, care and support, HIV impact alleviation, reduction of gender inequalities as they relate to HIV prevention, treatment, care and support and stigma and discrimination (FNDP: 2006-2010).

However, there are still some areas recommended by the multi-sectoral strategy that are explicitly missing from the FNDP. The design and implementation of harm reduction strategies for IDU and MSM in prisons while recommended in the NASF is missing in the FNDP. The reduction of income inequalities as they relate to HIV treatment, care and/or support and women economic empowerment is not directly mentioned by the FNDP and only referred to as 'supporting highly vulnerable groups.'

Achievements and Challenges in Strategy Development and Implementation

Overall, strategy planning efforts in HIV programmes in 2009 have been rated at 6.8 out of 10 and key achievements in the area since 2007 were related to the involvement of all sectors in the planning of the national HIV and AIDS response with the completion of the *National Strategy for the Prevention of HIV and STIs of 2009* often used to illustrate this success. Another key achievement in the area of strategic planning was the success of reviewing the NASF the *Joint Mid-Term Review* conducted in 2008 with the involvement of key stakeholders and which among others recommended actions including policy shifts in improving the implementation of the NASF for the remaining years. The increase in the number of line ministries, departments and companies that have introduced workplace policies is also a notable achievement for the reporting period.

A number of challenges were also associated with efforts in the area of strategy planning. These included donor dependency for financing strategy implementation, inadequate mechanisms for monitoring the NASF implementation including the absence of indicators and targets for emerging issues such as male circumcision and inadequate support for the implementation of workplace policies. These challenges are also highlighted in the report for the *Joint Mid-Term Review of the NASF.*

Political Support

In the area of political support, the inadequacy of government in funding HIV and AIDS efforts was widely seen as a challenge that has not improved over the last two years and the rating of six out of ten is reflective of that. While it is lower than the 2007 rating, a drop of one point still demonstrates the perception of stagnation in this area.

Table 3-4: Political support for the HIV and AIDS programme

Political support for the HIV and AIDS programme	5	7	6

Political Pronouncements on HIV and AIDS Efforts

As a way of providing a supportive political environment, high government officials were said to speak publicly and favourably about HIV efforts in major domestic forums at least twice a year including the president, other high officials and officials in regions and districts.

Presence, Structure and Role of National Multi-sectoral AIDS Coordination Body

Zambia has an officially recognised national multi-sectoral AIDS coordination body i.e. the *National HIV and AIDS/STI/TB Council (NAC)* established in 2002 through an act of parliament and it is chaired by *Bishop Joshua Banda.* NAC also has a functional secretariat led by the *Director General.* NAC has an active government leadership and participation through representation by permanent secretaries of line ministries and includes civil society representatives and the private sector (NASF, 2006). The NAC board comprises 15 members with five members representing civil society organisations, one representing people living with HIV and AIDS and two representing the private sector.

Harmonisation of National Laws with HIV and AIDS Policies

There hasn't been notable efforts to review national policies and laws to determine which, if any, are inconsistent with the *National AIDS Control* policies. A concrete example of a policy or law that was amended to be consistent with HIV and AIDS policy is that on the health insurance policy for HIV positive people who were in the past considered not to be 'insurable.' A review conducted by ZARAN on laws was also cited even though this focused more on the consistency of laws with the *International Guidelines on HIV and Human Rights.*

Achievements and Challenges in Political Support for HIV and AIDS Efforts

The overall rating for political support for the HIV and AIDS programme in 2009 was 6.13 out of 10. Key achievements since 2007 were that politicians have been able to come forth and voice out on HIV and AIDS during conferences or when called upon, the commitment shown by the President Rupiah Banda, the Vice-President and the First President (Dr Kaunda) on HIV efforts and the involvement of political appointees in the launch of the *National Strategic Framework Mid-Term Review* was seen to signify political commitment.

Monitoring and Evaluation

The overall rating for Monitoring and Evaluation dropped by two points compared to an overall rating of eight out of ten for 2007. While the nation has adopted the 'three ones' including one monitoring and evaluation plan, implementation of the plan which is donor dependent was equally seen as a challenge just as was the case with political support. Harmonisation and alignment to the national M&E by partners was seen as a challenge as manifested by the late and non-submission of data collection tools to NAC.

Table 3-5: M&E efforts of the HIV programme

M&E efforts of the HIV programme	5	8	6

One Monitoring and Evaluation Plan

Zambia has adopted one monitoring and evaluation plan. Within the concept and practice of the 'three ones' is 'one monitoring and evaluation framework.' (NASF). The *National HIV and*

AIDS/STI/TB Monitoring and Evaluation Plan was developed in 2006 and covers the period 2006-2010. Key partners have endorsed it as it was among other things developed through consultative meetings with key partners including the United Nations Agencies, US Government Agencies, international and local NGOs, FBOs, civil society organisations, PLWHAs, private sector, academic institutions and key government agencies (National HIV and AIDS Monitoring Plan, 2006). However, the *Monitoring and Evaluation Plan* does not cover important constituents of an enabling policy environment such as human rights and advocacy as activities related to this are clearly missing from the plan with no mechanisms to adequately measure them.

Standardisation of the M&E Plan

The national monitoring and evaluation plan includes the key components of a standard M&E system such as data collection strategy, standardised set of indicators, guidelines on tools for data collection, data quality assessment strategy and data dissemination and utilisation strategy.

The Zambia M&E plan identifies seventy-eight (78) performance indicators to be used to measure the national response to HIV and AIDS response at impact, outcome and output levels. 'However, the M&E plan did not include targets for all the indicators and targets for some indicators were unrealistically low. These have since been re-visited and re-set to align them against the universal access and MDGs targets set by the MoH' (JMTR, 2009).

For data collection and data sources, the M&E system draws information from a total of nine surveys, one health management information system and programme reports captured through a NAC developed activity form. Each of these has an in-built dissemination mechanism including reports, meetings, M&E dissemination seminars, the UNGASS report and the NAC website (NAC M&E Plan, 2006). There is a budget for the implementation of the M&E plan and while the National M&E plan recommends that the budget for M&E should be about 10 per cent of the national HIV and AIDS/STI budget information was not available as to whether or not this has been achieved. At the same time, funding for M&E activities has not been fully secured due to either the sporadic or lack of funding from the funders including government.

NAC M&E Unit

The *National AIDS Council* has a functional national M&E unit i.e. the *M&E and Research Directorate* based at the National AIDS Council and managed by one full-time and two temporal staff. The *Joint Mid-Term Review* of the NASF held in 2008 revealed that the *M&E and Research Directorate* was understaffed as key positions of Statistician, Research Specialist and Resource Centre Specialists were vacant.

Stakeholder M&E Reporting

NAC has developed mechanisms to ensure that all major implementing partners submit their M&E data to the M&E unit. The data sharing mechanisms include the M&E working group which meets on monthly basis, dissemination workshops, the NACMIS (database) and the national data collection tool-NARF. The *NAC Activity Reporting System* is also in place to

compel partners to submit the required number of NAC Activity Report Forms. Partners have also successfully carried out *Joint Annual Programme Reviews.*

M&E Stakeholder Interaction

NAC has a national M&E theme group that meets regularly i.e. on a monthly basis, to coordinate M&E activities. The working group includes civil society organisations whose role among others is to provide guidance in the implementation of the M&E system. There is also a central national data base with HIV-related data i.e. the NACMIS managed by the National AIDS Council.

M&E Reporting Mechanism

Zambia has an annual reporting mechanism on M&E i.e. the *National Annual HIV and AIDS M&E Report* with surveillance on key indicator data. On a scale of 0-5, M&E data is used for developing or revising the national AIDS strategy (2.8), for resource allocation (2.6) and for programme improvement (2.9). The report is procedurally linked to the GRZ annual work planning and budgeting process to ensure that issues raised that need adjustments and inclusion in the national budget are reflected wherever possible (National HIV and AIDS M&E Plan, 2006). This is also achieved by disseminating the report to stakeholders from the public, private and civil society.

Capacity Building in M&E

NAC with support from partners has developed a *National M&E Capacity Building Plan* (JMTR, 2009). There is also a plan for increasing capacity in M&E in recognition of the existing gaps in skills and infrastructure at national, provincial, district and community level and these plans are contained within the *National HIV and AIDS/STI/TB Monitoring and Evaluation Plan* 2006-2010. Capacity building efforts in M&E includes the University of Zambia centralised three week M&E Training Programme and the short course under NAC aimed at supporting service delivery units.

Achievements and Challenges in M&E

On a scale of 0-10, M&E efforts of the HIV programme in 2009 were rated at 6.29. Key achievements in M&E since 2007 include the development of the NACMIS, the realignment and revision of the indicators to suite the Health Management Information System (HMIS)needs, the joint annual programme reviews, in-house training in M&E and the training of regional and district NAC employees and affiliates in M&E. Remaining challenges in M&E efforts were incomplete implementation of the M&E and strategic plan, need to expand on the M&E unit at the NAC directorate, lack of sustainability in the financing of M&E activities with funding being sourced from donors, absence of data at the lower levels e.g. on prevalence rates and the untimely dissemination of data. Other challenges include the late and non production and submission of quarterly reports by partners (especially the private sector), shortage of M&E staff at central and local levels and some key indicators not having targets.

Human Rights

The area of human rights remains a challenge and continues to be rated the lowest at four out of ten for 2009. Apart from sensitisation efforts on the policy for non-screening for

employment purposes and the work of selected civil society organisations in providing support to individuals discriminated against due to the HIV status, the general perception was that very little has changed in this policy area. The country still does not have laws protecting PLHIV and policies on discrimination are fully adhered to with a common example of the defense forces which still conducts mandatory testing for employment purposes.

Table 3-6: Effort to enforce the existing policies, laws and regulations

Policy Area	2005 Rating	2007 Rating	2009 Rating
Policies, laws and regulations in place to promote and protect human rights in relation to HIV	4	5	4
Effort to enforce the existing policies, laws and regulations	3	5	4

Existence of Laws Protecting PLHIV

Zambia has laws that have a bearing on the protection of PLHIV against discrimination. While most of these laws and regulations do not specifically protect people living with HIV against discrimination, there are general non-discrimination provisions that can be applied to the protection of people living with HIV. Apart from the *Citizens Economic Empowerment Act (2006)* which is HIV and AIDS specific, others including the *Employment Act* and the *Constitution of Zambia* are not HIV and AIDS specific. The specific laws are:

(a) The *Citizens Economic Empowerment Act (2006)* which prohibits HIV based discrimination at workplaces;
(b) The *Employment Act* which stipulates that people cannot be discriminated against based on social status;
(c) The *Disability Act* which prohibits discrimination against people with disabilities; and
(d) The *Constitution of Zambia* which has a clause protecting citizens against discrimination.

Existence of Non-Discrimination Laws Protecting MARPs

The country has limited non-discrimination laws that specifically protect MARPs and other vulnerable sub-populations. Specific vulnerable groups protected by law include children and women through the *sexual offences and defilement laws*. There are no laws protecting IDUs, MSM and CSWs. Prisoners are also protected through the prisons regulations stipulating that all prisoners will be treated in a humane way even though the extent to which this is applied to

sexual abuse is not well known. Some policy instruments were also seen not to be effective as they leave a lot of room for misinterpretation. For example, the *Industrial & Labour Relations Act CAP 269, Section 108*, while prohibiting discrimination based on social status has failed to protect PLHIV from discrimination as social status has been translated to imply economic status (JMTR, 2009).

The country has laws and regulations and policies that present obstacles to HIV prevention, treatment, care and support for MARPs and other vulnerable sub-populations populations. Men having sex with men, commercial sex workers, sexually active school-going children and prison inmates continue to be victims of these laws through the following:

Sodomy Law: The penal code through the sodomy law describes homosexuality as unnatural and outlaws it making it punishable. The *Sodomy law* makes it difficult for homosexuals to seek and access relevant services, facilities and products related to HIV prevention, treatment, care and support. Prison inmates who are known for homosexual arrangements are not able to access condoms as this may be perceived as encouraging the practice of homosexuality which is illegal.

Law on Prostitution: Elements of commercial sex work attract retribution under the statutory laws of Zambia. This also hinders the delivery of HIV prevention services to this population. However, the civil society has (though not on a large scale) been able to work around this law to deliver services to sex workers without necessarily appearing to be promoting the trade.

Sex Education and Condom Distribution: While sex education is allowed in schools, the *Ministry of Education* policy position is that condoms shall not be distributed to school going children. Considering that research has demonstrated that school going children are sexually active and engage in risky sexual encounters, sex education outside condom distribution will remain ineffective especially for the sexually active pupil.

HIV Policy and Human Rights

The promotion and protection of human rights is explicitly mentioned in the HIV policy and strategic documents. The *National HIV and AIDS/STI/TB Policy* and the *National HIV and AIDS Strategic Framework (2006-2010)* both recognise this issue. The HIV policy recognises that 'HIV and AIDS negatively touches and impacts fundamental rights. There have, for instance, been cases involving job redundancies and abrupt loss of income on account of the HIV or AIDS status of an employee....indeed, it has now been established that there is a correlation between the HIV and AIDS pandemic and the abuse of human rights.' The NASF further identifies the adoption of a human rights approach as a key guiding principle.

Support Mechanisms for Addressing Human Rights Violations

Mechanism to record, document and address cases of discrimination experienced by people living with HIV, most-at-risk populations and/or other vulnerable sub-populations are only in place and effective to a certain extent. The Human Rights Commission has a standard form for recording cases for follow-up in addressing general human rights grievances.

The courts of law also handle such cases under the labour law. Other avenues that document and address issues of human rights abuses include the Zambia Police and the *Zambia AIDS Law Research and Advocacy Network* which offers a free legal clinic for victims of HIV related discrimination.

Involvement of MARPs in Policy/Strategy Formulation

Government has also involved people living with HIV, most-at-risk populations and/or other vulnerable sub-populations in governmental HIV-policy design and programme implementation. Through the National AIDS Council, government has involved representative organisations of *People Living with HIV and AIDS*, risk groups and vulnerable populations by engaging civil society organisations such as NZP+, TALC, youths, the disabled, and women etc., to actively take part in policy/strategy formulation exercises.

Policies on Free Prevention, Treatment and Care and Support Interventions

Zambia as a country has policies on free services for HIV prevention services and antiretroviral treatment and HIV-related care and support interventions and there are steps to implement these policies.

(i) The *Ministry of Health* through the health facilities distributes free condoms including in public toilets.
(ii) There is a policy on free ARVs in government clinics.
(iii) Government also facilitates training of care givers to ensure effective home based care. Free nutritional support is given to PLWHAs and orphans.
(iv) There is free HIV testing and PMTCT services for pregnant women visiting government health institutions for antenatal.
(v) There are also free VCT and services in government clinics and male circumcision is offered freely in government health facilities.

Barriers on access to free prevention, treatment and care and support services exist. For pregnant women, the non-involvement of men in PMTCT services is a documented barrier as some women fail to disclose their positive status and fail to access treatment freely for fear of reprimand from their husbands. The distance to clinics especially in rural areas hinders pregnant women from going for antenatal services and therefore it becomes a hindrance to accessing the PMTCT services. Shortages of skilled personnel, insufficient laboratory equipment such as CD4 count machines in clinics make the process of accessing ART treatment a challenge as people have to be in long queues to see the only available health personnel for longer periods than is necessary. The food rations given in clinics are not adequate for all PLWHA in need and easily run out. There are also limitations on the range of drugs that are available for free in terms of 1st, 2nd and 3rd line treatment.

HIV Screening for Employment

The *HIV Policy* clearly prohibits compulsory HIV testing at places of work and further recommends that HIV positive employees are protected from harassment and discrimination. The country also has programmes in place to reduce HIV-related stigma including through the media, school education and by working with key personalities to speak out. However, while

HIV screening for employment purposes is prohibited under the HIV policy, the military screens recruits and only those who come out negative recruited into the armed forces.

Achievements and Challenges in Human Rights

Overall, the rating on policies, laws and regulations in place to protect human rights in relation to HIV in 2009 remains low at 3.875 out of 10 and the same applies for the rating on the effort to enforce the existing policies, laws and regulations in 2009 rated at 3.85.

Key achievements in the area of human rights since 2007 include the roll out of free ART to government clinics thereby contributing to meeting the need for the right to health and the sensitisation work on the policy for the non-screening for employment purposes. Challenges remain in this area; Knowledge levels about the laws on human rights and discrimination are still very low especially in rural areas and there is need for more sensitisation. The country still does not have a law for protecting people living with HIV and AIDS. Implementation of the HIV screening policy has not been effective as some employers are believed to still apply HIV

screening. The rights of the HIV disabled are not recognised e.g. there are no specific HIV messages for the deaf and blind. The rights of some high risk groups such as MSMs, IDUs, sex workers, prisoners are not safeguarded as targeting specific interventions at them may not augur well with existing laws.

Civil Society Participation

There was a significant increase in the rating for civil society participation compared to 2007, from five to seven out 10. This is largely attributed to an improved engagement of civil society organisations by NAC in its activities including policy formulation and implementation.

Table 3-7: Efforts to increase civil society participation

Efforts to increase civil society participation	4	5	7

Civil Society and Strengthening Political Commitment

The extent to which civil society contributed to strengthening the political commitment of top leaders and national strategy/policy formulations was rated highly at 3.6 out of five owing to various reasons. Through the *Civil Society Specialist* within the NAC structure, civil society involvement has been adequately coordinated and encouraged. NAC also regularly invites civil society organisations to attend policy and strategy formulation meetings and other consultative meetings. For example, the drivers to the epidemic were identified at a conference organised by NAC and attended by civil society organisations among others. The civil society also plays an advisory role to the government on HIV and AIDS issues. For example, the civil society participated in the formulation and review of the *Fifth National Development Plan* and specifically on the HIV and AIDS section. However, from the civil society perspective, there is more that needs to be done in enhancing political commitment. For example, there is need for further lobbying on increased government funding for HIV and AIDS programmes.

Civil Society Involvement in Strategic Planning and Budgeting

The extent to which civil society representatives have been involved in the planning and budgeting process for the National Strategic Plan on HIV and other planning activities was rated highly by CSOs and multilateral agencies. As an example, the National AIDS Council is currently in the process of developing the follow-up *National Strategic Framework* and the civil society organisations are actively involved. They have been attending planning meetings and have been requested to submit work plans with the view of including them in the final document. However, not all civil society constituents are invited for budgeting processes and notices are sent out late.

While the extent to which services provided by civil society in the areas of HIV prevention, treatment, care and support are included in the national AIDS strategy (3.88/5) and national AIDS reports (3.44/5) and rated highly, inclusion in the national AIDS budget was rated lowly (1.5/5). The civil society is not fully involved in the budgeting process especially that they source their own funds. Some of them, however, submit information to NAC on their budgets and commitments. For example, the estimated funding for the NASF 2006-2010 includes

budgets from cooperating partners including JICA, USG, NORAD, DCI, SIDA, DFID and the EU.

Civil Society Participation in Developing National M&E Plan

The extent to which civil society is included in developing the national M&E plan (3.85/5), participating in the national M&E committee (3.85/5) and M&E efforts at local level (3.71/5) was high. NAC coordinates the *Monitoring and Evaluation Theme Group* and civil society organisations are key to the activities of this group. The group meets on a regular basis to deliberate on issues pertaining to monitoring and evaluation in the area of HIV and AIDS. HIV and AIDS indicators also apply to all organisations working on HIV and AIDS and civil society organisations are equally responsible for reporting on these indicators. However and at local level, at local level, there are challenges especially when it comes to lack of coordination between the civil society and the NAC representatives. The work of civil society in human rights is limited by the absence of measurement parameters on human rights within the national M&E plan.

Diverse Representation of CSO in HIV Efforts

The extent to which civil society sector representation in HIV efforts is inclusive of diverse organisations was rated at 4/5. NAC coordinates various technical theme groups of which membership is drawn from diverse organisations. The technical groups include the prevention; treatment care and support; mitigation; decentralisation and mainstreaming; monitoring and evaluation and advocacy and coordination.

Civil Society Access to Financial and Technical Support

Accessibility of adequate financial and technical support for HIV activities by civil society is high and rated at 3.6 and 3.8/5, respectably. The common perception is that NAC or government does not directly fund civil society organisations, but a number of civil society organisations have been able to access funding from cooperating partners. Despite this perception, NACs mandate does not at all extend to funding CSOs. One challenge faced by smaller organisations including community based organisations in access funding is that they lack in capacity when it comes to proposal development. In terms of technical support, this is available and accessible from the *Ministry of Health* as well as within the civil society organisations, bilateral and multilateral agencies.

Role of Civil Society in Provision of HIV and AIDS Services

On the extent to which various HIV and AIDS related services are provided by civil society, the civil society organisations have been able to provide more services in the area of home based care, programmes for OVCs, stigma and discrimination reduction, prevention for sex workers and testing and counseling. Services with less civil society involvement include prevention for youths, prevention for IDU, prevention for MSM and clinical services. For MSM, sex workers and IDU, these services are generally lower even at national level and in some instances, only provided for by civil society organisations.

Achievements and Challenges in Civil Society Participation

Overall, the efforts to increase civil society participation in 2009 were rated at 6.625/10. Key achievements in this area include the increased research activity spearheaded by civil society

organisations including research on the drivers of HIV such as research on alcohol, multiple concurrent sexual partnerships, sex workers etc and a further achievement in this area is the recognition by the National AIDS Council of such studies which have been integrated into their documents including the *Zambia HIV Prevention Response and Modes of Transmission Analysis, 2009*.

Remaining challenges include the reduced funding to some civil society organisations following the global economic crisis and the varying benchmarks set by donors and NAC which have posed a challenge especially where integration is required.

Prevention

While efforts in the development and implementation of policies on HIV prevention were either rated lowly or shown to have stagnated, the policy area recorded more achievements than any other as demonstrated in the achievements section. This includes development of the Prevention Strategy which also detailed the need to reach out to risky groups including MSM and IDUs. This area has also seen the inclusion of emerging issues in HIV and AIDS including male circumcision, alcohol and multiple concurrent partnerships.

Table 3-8: Policy efforts in support of HIV prevention

Policy efforts in support of HIV prevention	5	8	6
Efforts in the implementation of HIV treatment, care and support programmes	6	7	7

Policy and Strategy on IEC

The country has in place policy and strategy contents that promote information, education and communication on HIV to the general population. The *National HIV Policy* identifies improved and expanded IEC as a key prevention and control policy measure. The *National HIV and AIDS Strategic Framework 2006-2010* further recommends IEC and BCC activities that will ensure people have access to clear, accurate information on safer sexual practices (ABC) and practices that perpetuate HIV transmission. *The National Strategy for the Prevention of HIV and STIs (2009)*, identifies BCC/IEC materials as being central to HIV prevention.

Policy/Strategy on HIV-Related Reproductive Health Education for Young People

The country has a policy/strategy promoting HIV-related reproductive and sexual health education for young people and HIV education is part of the curriculum in primary schools, secondary schools and teacher training. 'Under the *Basic Education Sub-Sector Investment Programme (BESSIP),* MoE developed a comprehensive HIV and AIDS strategy, which will be scaled up. This strategy is at three levels: the mainstreaming of HIV and AIDS issues in the curriculum; dissemination of information to both learners and teachers; and the workplace programme, which includes advocacy, and Antiretroviral Therapy (ART).' FNDP, (2006-2010). The country also has an HIV education strategy for out-of-school young people. The

National Strategy for the Prevention of HIV and STI 2009 has identified 6 clearly defined strategies on HIV and AIDS education for out-of-school young people.

Achievements in Policy Efforts in HIV Prevention

Policy efforts in support of HIV prevention in 2009 were rated at 5.57/10. Major achievements since 2007 include the development of the *National Strategy for Prevention HIV and STIs (2009)* which was completed in a collaborative way involving key stakeholders. The strategy went a step further to include emerging issues in HIV prevention such as male circumcision. The increase in the number of line ministries, departments and companies that have introduced workplace policies is an achievement worth mentioning.

Mechanisms for Needs Assessment for HIV Prevention Programmes

From both the government and the civil society perspective, the country identified specific needs for HIV prevention programmes through various mechanisms including results of behavioural studies both government generated as well as those conducted by civil society; reviewing relevant documents and coming up with the epidemiological synthesis reports that give a picture of how the country has responded to the HIV epidemic and the modes of transmission (Modes of Transmission Study) as well as broad-based consultations with organisations working in HIV prevention.

Extent of Implementation for HIV prevention Programmes

There is a general agreement between civil society and government on the extent to which HIV prevention has been implemented particularly on the population access to HIV prevention services and products including blood safety, PMTCT, IEC, condom promotion, HIV testing and counselling, risk reduction for sex workers and HIV prevention in the workplace. Both civil society and government presented the view that the majority of injecting drug users have not had access to HIV prevention services. For out-of-school young people and for HIV prevention in the workplace, CSO and government respondents did not agree, with CSO of the view that HIV prevention have been accessible to out-of-school youth whereas government was of the view that HIV prevention in the workplace is highly accessible to those in need. The aspect of harm reduction for men who have sex with men was scored as either not available or non-applicable by both civil society and government.

Achievements and Challenges in Implementation of HIV Prevention Programmes

The average rating for efforts in the implementation of HIV prevention programmes in 2009 was 5.85/10 for civil society and 5.62/10 for government. The commonly cited achievements in the implementation of HIV prevention programmes was the drop in the prevalence rate from 16 to 14.3 per cent, the increase in BCC activities related to HIV prevention, the promotion of male circumcision as an HIV prevention strategy, the expansion of PMTCT to most government clinics, the increased activity in condom distribution as witnessed by the constant supply in clinics, workplaces, public toilets and shops and the intensified media campaigns to address multiple concurrent partners as a key driver.

Challenges in the area of implementation of HIV prevention programmes included the inadequacy of qualified personnel government clinics including for PMTCT where in some cases lay counsellors are used to attend to expectant mothers and the inadequacy in

interventions targeting high risk groups such as MSMs, IDUs, sex workers, prisoners, youth and poor women.

Treatment, Care and Support

In the area of HIV treatment, care and support, the rating remained the same at seven out of 10 whereas for meeting the needs of OVCs, it dropped by two points. Whereas ART has expanded to most areas with more health facilities administering it, the rural areas still lag behind as facilities in the rural areas are either lacking in qualified personnel and equipment, or not easily accessible due to the long distances. The needs of OVCs while being serviced by the civil society are not adequate and often outpaced by the growing population of OVCs. Government efforts were also seen not to be consistent as some projects targeted at street kids were at one time abandoned.

Table 3-9: Efforts in the implementation of HIV treatment, care and support programmes

Efforts in the implementation of HIV treatment, care and support programmes	6	7	7
Efforts to meet the HIV-related needs of orphans and other vulnerable children	6	7	5

Policy and Strategy in HIV Treatment, Care and Support

The country has a policy and strategy to promote comprehensive HIV treatment, care and support and policy measures to that effect are contained within the HIV Policy. The NASF 2006-2010 has an overall objective, 'to expand access to appropriate care, support and treatment for people living with HIV and AIDS, their care givers and their families, including services for TB, STIs and other opportunistic infections.'

Needs Assessment for Treatment, Care and Support Services

The country has identified the specific needs for HIV treatment, care and support services according to both government and civil society representatives. There is an estimated number of people who are in need of treatment and this number is arrived at through monitoring data, population based surveys, data from testing sites and consultative meetings with stakeholders. The needs of people affected by HIV and AIDS including orphans are determined in consultation with civil society organisations and community based organisations working on the ground.

On access to key treatment, care and support services, both government and civil society were of the view that the majority of people in need had access to services such as antiretroviral therapy, sexually transmitted infection management, psychosocial support for people living with HIV and their families, home-based care, HIV counselling and testing for TB patients, TB screening for HIV-infected people and HIV treatment services in the workplace. There was also concurrence on access to nutritional care with both government and civil society organisations with the view that the majority in need of this service do not have access to it. However, there were significant variations in views over access to the following services,

pediatric AIDS treatment and cotrimoxazole prophylaxis in HIV-infected people (civil society with the view that there was guaranteed access contrary to governments view).

Achievements and Challenges in the Implementation of Treatment, Care and Support

The overall rating for efforts in the implementation of HIV treatment, care and support programmes in 2009 was 6.85/10 for civil society and 8/10 for government. Key achievements in this area were; the availability of free ART, improvement in accessibility of pediatric ART, workplace provision of ART and the inclusion of more health centres to administer ART. However, not everyone who needs treatment has been able to access it. Distance to the health centres is a challenge especially in remote parts of the country. This makes it difficult for people to access treatment and those who do, fail to adhere to the treatment. Treatment adherence is also compromised by erratic nutritional support.

Policy and Strategy for Addressing Needs of OVCs

The country has a policy and strategy aimed at addressing the additional HIV-related needs of orphans and other vulnerable children. The HIV Policy has an objective of strengthening care and support structures for OVCs and a key measure of promoting and supporting community-based care of OVCs and families looking after orphans. The *National HIV and AIDS Strategic Framework* also has the objective, 'to protect and provide support for orphans and vulnerable children' and outlines strategies for the strategic objective. In addition, Zambia has developed the *Child Policy* that also comprehensively addresses OVC issues as well as a five-year national strategic plan on OVC and district level coordinating mechanisms for OVCs also exist in some districts (FNDP, 2006).

Operational Definition of OVC

There is an operational definition of an orphan and vulnerable child. 'An orphan is defined as a child below the age 18 with one or both parents deceased. A vulnerable child is defined as a child below age 18 who has a chronically ill (sick for three or more consecutive months within the last 12 months) parent or who lives in a household where an adult has been chronically ill or has died' (ZDHS, 2007).

Achievements and Challenges in Meeting Needs of OVCs

Overall, the efforts to meet the HIV related needs of orphans and other vulnerable children was 4.66/10 for civil society and 4.5/10 for government respondents.

Key achievements in the area of efforts to meet the HIV-related needs of orphans and other vulnerable children in 2009 included the increased proliferation of NGOs dealing with support and care for OVCs and the increased support to OVCs in the areas of nutritional, material, health, educational and psychosocial support. Remaining challenges in this area include that care givers of orphans are also not adequately supported, the inadequate financial support given to institutions looking after orphans and the weak monitoring systems aimed at capturing information on OVCs. For example, there is need to come up with reliable ways of establishing the number of OVCs in the country.

3.3 National Programmes Indicators: Prevention, Care and Support

The national programme indicators focuses on the progress made around blood safety, antiretroviral therapy coverage, prevention of mother-to-child transmission, co-management of TB and HIV treatment, HIV testing, prevention programmes, services for orphans and vulnerable children

Prevention

3.3.1 Donated Blood Safety - Percentage of donated blood units screened in a quality assured manner

Blood safety programmes aim to ensure that all blood units are screened for transfusion-transmissible infections, including HIV, and that only those units that are non-reactive on screening tests are released for clinical use. In many countries, blood units are not screened for all the major transfusion-transmissible infections. Often, even when screening does occur, the safety of blood is compromised by inaccurate test results due to the poor quality or incorrect storage of test kits. Furthermore, inadequate staff training or a lack of standard operating procedures may result in laboratory errors. This could lead to blood units being classified as safe even when they are infectious, posing a serious risk of transmission of HIV through unsafe blood.

Universal (100 per cent) screening of donated blood for HIV and other transfusion-transmissible infections cannot be achieved without mechanisms to ensure quality and continuity in screening. In some countries, interruptions to supplies of test kits and reagents, or emergency situations, can result in the use of blood for transfusion without screening for transfusion-transmissible infections. The development of systems for reliable and regular supplies of low-cost, high-quality test kits and reagents and effective stock management are therefore essential to ensure universal quality screening of blood units.

Thus, it is crucial that all donated blood units be screened for HIV in a quality-assured manner. The following methodologies are two key components of quality assurance in screening.

(i) The use of documented and standardized procedures (standard operating procedures) for the screening of every blood unit.
(ii) Participation of the laboratories in an External Quality Assessment Scheme for HIV screening in which external assessment of the laboratory's performance is conducted using samples of known, but undisclosed, content to assess its quality system and assist in improving standards of performance

Zambia has maintained 100 per cent of donated blood units that are screened in a quality assured manner, an achievement which was also attained during the last reporting period. Since 2005, only nine ZNBTS provincial blood centres are allowed to conduct blood donor recruitment, blood collection, blood screening/testing and distribution to all the hospitals/transfusion outlets, within each catchment area. National guidelines on blood safety

and transfusion do not allow any organisation/institution other than ZNBTS to collect blood for transfusion.

The hospitals receiving blood from ZNBTS centres currently stand at 132. They include public, faith-based, mine hospitals and private hospitals. Blood is provided to all these facilities on a free of charge basis, so as to ensure equity of access to 'cost effective, safe blood and blood products'.

The equipment and testing protocols used at all the centres are standardised. Currently, the minimum testing platform for HIV, HBV and HCV is ELISA. Rapid Diagnostic Tests have long since been phased out in all ZNBTS facilities. For HIV screening, Murex combo test kits (Anti-body Antigen Tests) are currently in use. Lusaka and Kitwe blood banks also have AxSM Automated Immuno Analysers and capacity to produce blood components.

All ZNBTS facilities and activities are subjected to rigorous External Quality Assessments (see Annex 4) with the RCPA Serology Quality Assurance Programme Private in Australia for HBV and HCV, and with Contract Laboratory Services (CLS) of South Africa for HIV. The ZNBTS Lusaka Laboratory is also periodically audited by the Division of AIDS (DAIDS) of the National Institute of Health of the USA, on HBV and HCV tests only. Table 3-10 below shows the units of blood screened in a quality assured manner out of the total blood units donated.

Table 3-10: Percentage of donated blood screened in a quality assured manner

	All	All
Percentage of donated blood units screened in a quality assured manner	100%	100%
Number of donated blood units screened for HIV in blood centres/blood screening laboratories that have both: (1) followed documented standard operating procedures and (2) participated in an external quality assurance scheme	82,527	102,581
Number of donated blood units screened, using documented standard operating procedures	82,527	102,581
Number of donated blood units screened in laboratories that participate in an EQA Scheme	82,527	102,581
Total number of blood units donated	82,527	102,581

Source: Annual Progress Report 2009, Zambia National Blood Transfusion

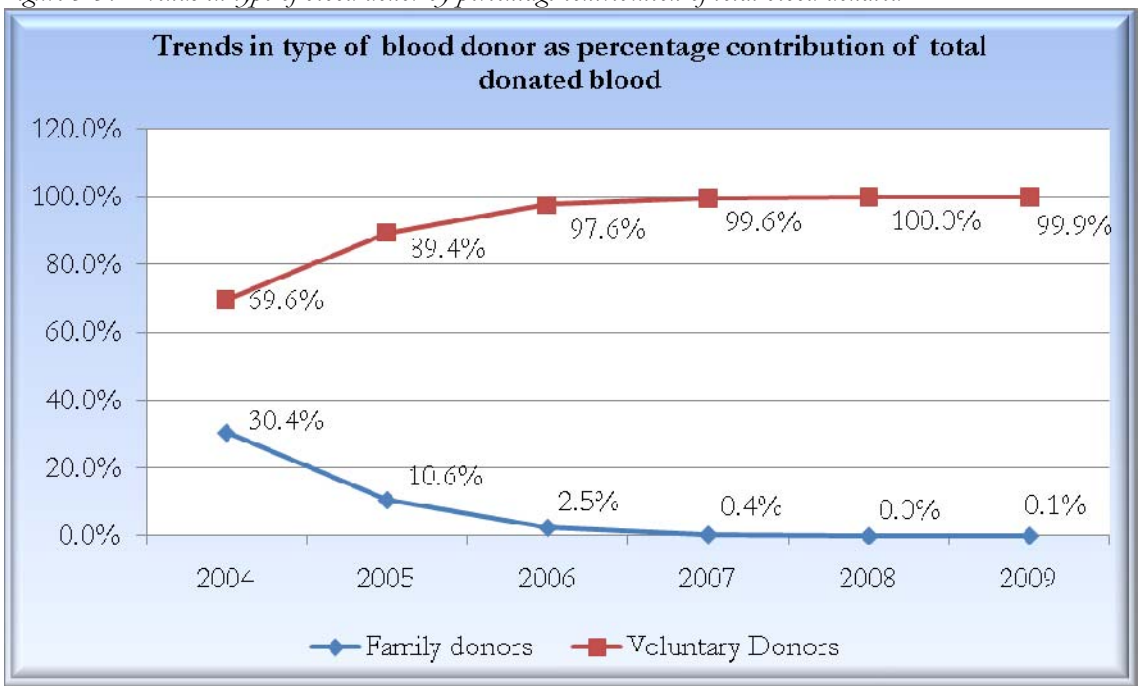
Since the last reporting period in 2008, the total donated blood units have shown increases in the last two years currently under review. Available data on blood units collected by the ZNBT indicate that in 2004, a total of 38,447 of which 30.4 per cent was donated by family members while voluntary donors accounted for 69.6 per cent. In 2005, the total blood units donated increased to 61,982 but family donations decreased to 10.6 per cent while voluntary donations increased to 89.4 per cent. Although there was a drop in the blood units collected

in 2006 to 54,308 the trends in type of donor were maintained with family donations dropping to 2.5 per cent while voluntary donors increased to 97.6 per cent. However, for 2007, Zambia recorded an increase in blood units donated once again to an all time high of 68,056 of while decreasing on the family donations to 0.4 per cent and successfully increasing on voluntary donors to 99.6 per cent.

For the period under review, an upward trend in the blood units collected was achieved reaching 82,527 and 102,581 for 2008 and 2009 respectively. Incidentally all the blood collected in 2008 was from voluntary donors with none from family. The case was almost the same for 2009 although family donors contributed 0.1 per cent while voluntary donors accounted for the remaining 99.9 per cent.

Figure 3-3 below, illustrates the trends in the type of donor as a percentage of the total blood units donated for a six year period from 2004 to 2009.

Figure 3-3: Trends in type of blood donor by percentage contribution of total blood donated



Data Source: Annual Progress Reports (2005-2009), ZNBT; Programme Monitoring Report 2009, ZNBT

Discussions with the Zambia National Blood Transfusion senior management and technical staff established that the institution aims to reduce family donors as much as possible in preference for voluntary donors. Family donations are usually as a result of emergency blood transfusion, which although every care and effort is taken to have the blood donated screened, errors in ensuring quality assurance is adhered to maybe compromised.

Blood transfusion needs are influenced by several factors, including the population size and distribution, levels and complexity of disease burden, public awareness, levels of knowledge and practice of clinical medicine, and improvements in the standards of medical care facilities. The Centre for Disease Control and Prevention (CDC) has proposed to use either one per cent or two per cent of the population to estimate blood transfusion needs, depending on each

country's level of development. On this basis, Zambia's blood transfusion needs are currently (2009) estimated at 129,000 units per year, which represents one per cent of the population.

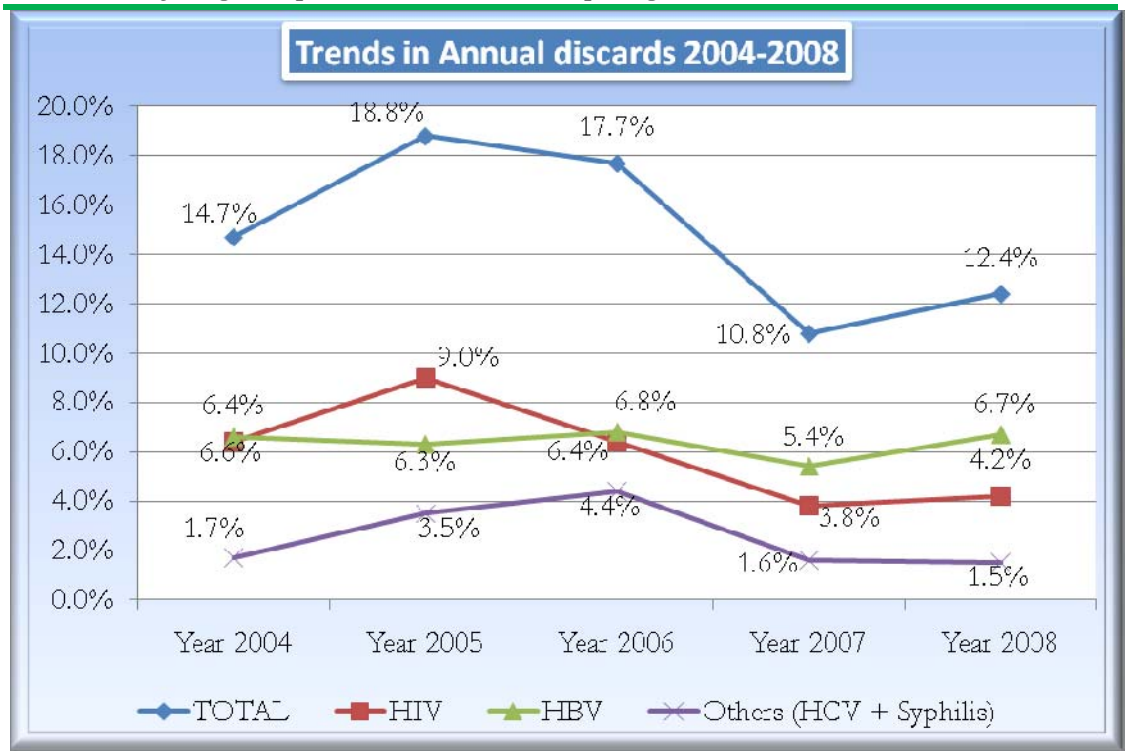
Over the past four years, significant scaling up and strengthening of blood transfusion services has been recorded. Blood collections have increased to 102,581 units at the end of 2009. Based on the recent performance trends, the 100,000 blood collection units per year projected to be reached by March 2010, has been surpassed and by 2013 the national blood transfusion needs would be fully met.

Mandatory laboratory testing of blood for HIV, HBV and HCV, using ELISA method, and syphilis using RPR kits, has continued to be the standard requirement for all donated blood at all the nine regional blood transfusion centres. The equipment, test kits, reagents and consumables used have been standardised and are procured centrally. The algorithms used for testing donated blood for TTIs are also standardised and based on the national and WHO guidelines.

The existing algorithm for blood testing and confirmation requires that the following steps are followed: all blood samples undergo mandatory testing for HIV, HBV, HCV and syphilis; and all reactive samples undergo repeat testing, in duplicate. Confirmed reactive samples are disposed off in accordance with the existing disposal procedures for biological waste, through incineration.

During the period under review, ZNBTS on further strengthening of systems for mandatory testing of blood and the capacity for blood components preparation. ZNBTS has also continued to place emphasis on finding ways of reducing discards attributable to TTIs. In 2008 the total discards stood at 12.4 per cent, increasing from 10.75 per cent in 2007. Figure 3-4 presents the annual discard trends from 2004 to 2008.

Figure 3-4: Trends in annual blood discards between 2004 and 2008



Data Source: Zambia National Blood Transfusion Annual Progress Report, 2008

In conclusion, Zambia has in the past five years witnessed significant scaling up and strengthening of blood transfusion services countrywide. However, more efforts are required in order to meet the national needs and further improve the standards of blood transfusion practices in the country. In this regard, there is urgent need to complete the on-going development of the national blood transfusion policy, the legal and regulatory frameworks, and the on-going restructuring of ZNBTS, so as to ensure appropriate organisation, coordination and staffing, and provide further improvements in the efficiency and effectiveness of the national blood transfusion system.

HIV Testing in the General Population

While significant progress has been made in access to treatment, blood safety and injection safety, the epidemic cannot be brought under control without stopping new infections. New infections have been increasing from an estimated 67,602 adults in 2006 to estimated 72,019 in 2015, of which almost 55 per cent are females and 45 per cent are males. This translates into approximately 185 new infections every day.

Unprotected heterosexual sex and the phenomenon of multiple "concurrent" sexual partners is believed to be an important factor in accelerating the spread of HIV. Therefore, targeted prevention efforts must address the gender and social norms which perpetuate this behaviour. Condom use is common with casual sexual partners (46 per cent) and in instances of transactional sex, e.g. exchange of sex for favours, money, or gifts.

Only 15 per cent of sexually active adults know their HIV status. Multiple approaches exist to improve knowledge about status. These include home- based and mobile testing, fixed sites

where clients can seek services, and testing and counselling in health facilities for pregnant women, testing of TB patients, testing of in-patients and out-patients in health care facilities. Regular testing and early identification of infected adults is a critical path to access of care and treatment, while testing of couples and appropriate counselling contributes to prevention.

3.3.2 Percentage of health facilities that provided HIV testing services (2009)

Since the last reporting period, the number of public and private facilities providing VCT/CT services had increased from 1,102 sites in 2007 to all the 1,563 public and private health facilities at the end of 2008. Of this number, private owned health facilities were 92 while the public health facilities accounted for 1,471 of which 117 were mission and the balance of 1,354 were owned by the Government of the Republic of Zambia (GRZ). This indicates that 100 per cent of all health facilities in Zambia provided HIV counselling and testing services from a combined total of 1,800 HIV counselling and testing sites covering the whole country in 2009.

3.3.3 Number of individuals aged 15 and over, who received HIV testing and counselling and know their results

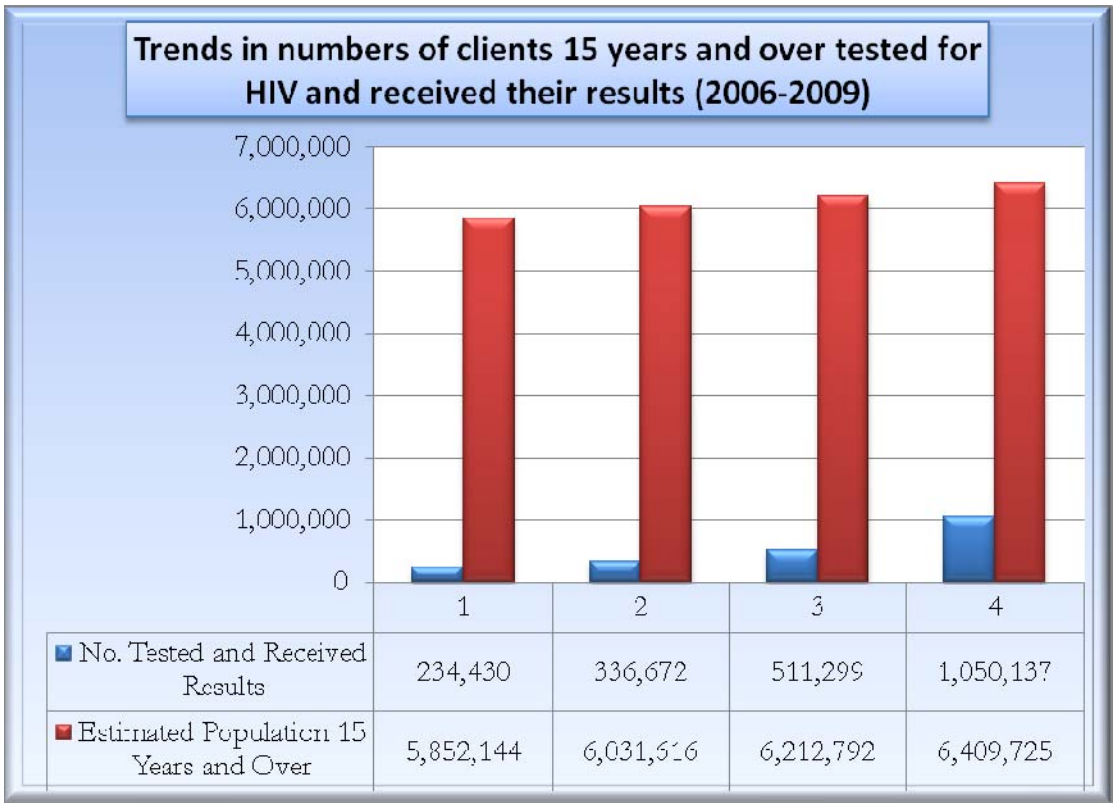
At the end of 2008, the number of people aged 15 years and older who received HIV testing and counselling through any method or setting in the past 12 months and know their results was 511,266 of which 80,659 were male while 430,607 were female for the period January to December 2008[28]. The high number of females tested was mostly from the PMTCT programme which accounted for 364,331. During the same period, of the 80,659 males tested for HIV and received their results, 19,466 were male partners tested under the ANC programme. The number of adult general population tested for HIV and also received their results was 124,089. This data was from VCT programme services statistics using routine reports from all service points including VCT sites, clinics, hospitals, NGOs outreach points and others. However, it should be noted that these numbers of people aged 15 years and over who received an HIV test, counselled through any means or settings in the past 12 months and know their results did not include Lusaka province and some data from partners who are also providing the services. Data received from the facilities on this indicator is usually not disaggregated by age groups.

For the year 2009, a total of 1,050,137 people aged 15 years and older received HIV testing and counselling through any method or setting and know their results. This represents almost double the 511,299[29] reported in 2008. For those who accessed the service in 2009, there were more for females (734,968) as compared to males (315,169). Data disaggregation by age was not available at the time of reporting. Similar patterns were observed from data among partners when disaggregated by sex. [30]The only exception was in North Western province were more male than female clients tested for HIV and receiving their test results and this was as a result of clients being tested through workplace activities in the mines.

An assessment of available data on trends in the number of individuals aged 15 and over, who received HIV counselling and testing and know their results show that more and more people in the general population 15 years and older have been reached since 2006 when only 4 per cent of the estimated 5,852,144 individuals in the target age group. This increased to 6 per cent (336,672) in 2007. By 2008, another increase was achieved reaching 8 per cent (511,299) and the doubled for 2009 to 16 per cent or 1,050,137. See figure 3-5 below

[28] Routine Programme Monitoring Information Report 2009, Ministry of Health.
[29] Health Sector response to HIV and AIDS, MoH 2009.
[30] NAC Activity Reporting Form Data Annual Report, 2008.

Figure 3-5: Trends in Number of Clients Tested for HIV and Received their Results from 2006-2009(Q2)



Data Source: Routine Programme Monitoring Report, MOH 2006-2009; Zambia Population Projection Report, 2003, CSO

3.3.4 Percentage of women and men aged 15-49 years who received an HIV test in the last 12 months and who know their results

In order to for individuals in the general public to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment. For 2009, the Zambia population aged 15-49 who were tested in the last 12 months and received their results still remains at 15.4 per cent indicating no change since the last reporting period for 2006 and 2007 (See *Table 3-11*).

Table 3-11 shows that for all age groups, females are more likely to have an HIV test and receive their results with the female age group 20-24 accounting for the most likely at 21.9 per cent against their male counterparts in the same age group at 14.1 per cent. The least likely age group to be tested and receive their results is males in the age group 15-19 at just 7.3 per cent against females in the same age group at 12.3 per cent. Incidentally, for both males and females HIV testing is least for the age groups 15-19 years, peaks with the age group 20-24 years and then drops for the age group 25-49 years.

Table 3-11: Percentage of women and men aged 15-49 years who received an HIV test in the last 12 months and who know their results

Disaggregation		*Numerator:* Number of respondents aged 15–49 who have been tested for HIV during the last 12 months and who know their results	*Denominator:* Number of all respondents aged 15–49	*Value:* Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know their results
All (15-49)		2,028	13,141	15.4%
Males	All	701	5,995	11.7%
	15-19	103	1,416	7.3%
	20-24	150	1,066	14.1%
	25-49	449	3,513	12.8%
Females	All	1,322	7,146	18.5%
	15-19	201	1,574	12.8%
	20-24	300	1,370	21.9%
	25-49	822	4,202	19.6%

Source: ZDHS, 2007

A review of the ZSBS 2009 also showed that almost twice (56.7 per cent) more women were likely to be tested than the males (31 per cent). The report further indicates that the urban population was more likely to be tested for both sexes. Of the 1,169 rural males sampled, 27.5 per cent indicated that they had been for an HIV test in the last 12 month and got their results against 36.8 per cent of the 732 urban males sampled.

3.3.5 HIV testing in sex workers-2009: Percentage of (MARPs) sex workers who received an HIV test in the last 12 months and who know their results

In order to protect themselves and to prevent infecting others, it is important for sex workers to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment. For Zambia, data is only available for female sex workers and reporting for this period has been limited to that.

The percentage of sex workers who received an HIV test in the last 12 months and know their results is 74.5 per cent based on the 1,263 female sex workers[31] in the Round 4 study. This signifies a decrease of 11.5 per cent from the 85.7 per cent of the 602[32] attained in the Round 3 study but remains much higher than the 19.8 per cent of the 308[33] FSW in the Round 1 study by Corridors of Hope (CoH). See *Table 3-12* below.

[31] Round 4 Behavioral Surveillance Survey Zambia, 2009, CoH II.
[32] Round 3 Behavioral Surveillance Survey Zambia, 2006, CoH II.
[33] Round 1 Behavioral Surveillance Survey Zambia, 2000, CoH II.

Table 3-12: Trends in Percentage of sex workers who received an HIV test in the last 12 months and who know their results (2005-2009)

	2005	**2006**	2009
Percentage of sex workers who received an HIV test in the last 12 months and who know their results	19.8%	85.7%	74.5%
Number of sex workers who have been tested for HIV during the last 12 months and who know their results	61	516	941
Number of sex workers included in the sample	308	602	1,263

Data Source: 2009 BSS Round 4, CoH

For the Round 4, four districts with high concentration of female sex workers were purposely targeted by CoH and these were Chirundu, Kapiri Mposhi and Livingstone with an addition of Solwezi. Among these districts almost an equal percentage of female sex workers from Livingstone (80.6 per cent of 475) and Chirundu (79.3 per cent of 198) were the most likely individuals to get tested and obtain their results followed by Solwezi (72.7 per cent of 238). Kapiri Mposhi female sex worker accounted for the least (68.8 per cent of 352) likely to be tested and obtain their results.

A positive observation is that the majority of the sex workers reported having access to VCT services. About three-quarters of them had been voluntarily tested for HIV. The majority of FSWs tested had found out their HIV test results. Among those who had never been tested for HIV, the majority of them said they would be interested in having an HIV test. This data is at variance with the data from the general population survey which shows that only 15.4 per cent have ever been tested and know their results (ZDHS, 2007). Fear or being scared of the results was a common reason for those who were not interested.

Percentage of (MARPs) Long Distance Truck Drivers (LDTD) who received an HIV test in the last 12 months and who know their results

The BSS (Round 4) was a cross-sectional study conducted among LDTDs who are the main clients of FSWs. The study was carried out in four sites: Livingstone/Kazungula, Chirundu, Kapiri Mposhi and Solwezi. Except for Solwezi, all of the other sites have participated in at least one of the three previous BSS studies.

Two-stage time-location cluster sampling was used. The team first identified and mapped congregation points or parking places for the LDTDs and their trucks. These congregation points included truck depots and parking areas and weighbridges or 'dry-pots'. During this step the sampling frame was defined. The different parking areas formed clusters. The average number of trucks in each established cluster was estimated during different periods of the day time and at night when the border or weighbridge closed. The second stage of time-location sampling involved the selection of respondents for the interview by data collectors with support of facilitators and the supervisor.

The respondents were asked a series of questions pertaining to access to and use of VCT. The findings show that out of the 1,845 respondents in the survey, 86.3 per cent reported having

access to confidential HIV testing. About 51.5 per cent (954) said they had been tested for HIV, with 59.7 per cent (562) having tested within the 12 months prior to survey. Of those who had been tested, 91.4 per cent (871) said they had done so voluntarily, and of those, 99.1 per cent (931) found out/received the test results. Among those never tested, 81.7 per cent said they were interested in getting an HIV test. Over a third (38 per cent or 82) had never tested because they were scared.

Knowing one's HIV status is an entry point to HIV care. It is encouraging to see that the proportion of LDTDs that have tested and know their HIV status has increased over the years. HIV counseling and testing should continue to be made more accessible through many outlets, including mobile VCT centers, to serve LDTDs who are waiting at border posts and depots. Increase in access to VCT services will enable as many LDTDs (and others) as possible to test and to get treatment and care as necessary. However, caution should be exercised and sufficient preparations made when deciding to conduct an HIV test to waiting truck drivers to protect them from potential harm or possible negative effects (e.g. psychological effects) caused by knowing their status.

HIV counselling and testing is recommended as HIV prevention strategies. Therefore, it should be widely promoted together with other prevention strategies. These efforts should be carried out in consultation with key partners such as the DATF and DHMT. In the case of LDTDs, these strategies should be promoted with their participation.

Prevention of Mother-to-Child Transmission - 2008/2009

In the absence of any preventative interventions, infants born to and breastfed by HIV-infected women have roughly a one-in-three chance of getting infected themselves. This can happen during pregnancy, labour and delivery or after delivery through breastfeeding. Mother-to-child transmission accounts for over 10 per cent of new infections, yet with effective treatment and follow-up, Zambia could virtually eliminate paediatric HIV. Effective drug regimes started early in pregnancy and ARVs for either mother or infant continued throughout breastfeeding can reduce the transmission risk to 1-2 per cent. Infections among children have been gradually declining from 13,733 in 2006 to 10,306 in 2008. During the same period, access to treatment for babies has increased significantly. Just over 30,000 Zambian children are estimated to be HIV positive, of which almost two-thirds are on treatment. Estimated deaths of children due to HIV have been decreasing from 11,404 in 2006, to 8,144 in 2008, but the burden and lifelong costs and suffering of children from this preventable disease is increasing.

Pregnant and lactating women are at high risk of HIV infection; 2 per cent to 3 per cent will acquire HIV infection during each pregnancy. 11 per cent of married couples are discordant for HIV (e.g. one is positive and one is negative), with men and women equally likely to be the infected partner. Lack of knowledge of partner status and low levels of condom use in longer term relationships contribute to high transmission of HIV within stable relationships and families. Pregnancy care is a key gateway to the delivery of integrated services to families because 80 per cent of pregnant women are tested for HIV in antenatal clinics. Only 10 per

cent of partners are tested. This missed opportunity must be addressed with a goal of universal coverage with family- oriented prevention of HIV.

The risk of mother-to-child transmission can be significantly reduced through the complementary approaches of antiretroviral regimens for the mother and prophylaxis to the infant, implementation of safe delivery practices and use of safer infant feeding practices. These indicators set out to assess progress in preventing mother-to-child transmission of HIV.

3.3.6 Percentage of pregnant women who were tested for HIV and received their results

During the period, January to December 2009, a total of 532,484 pregnant women were tested for HIV (during pregnancy, during labour and delivery and during post-partum period (<72 hours)) including those with previously known HIV status out of which 505,859 received their results. Those who received their results, accounted for 87 per cent based on the estimated 581,103 pregnant women. From the total tested, 74,191 or 14 per cent, got HIV positive results.

Further analysis showed that from the 510, 615 pregnant women with unknown HIV status attending ANC, who were tested during ANC, 483,990 received results out of which 52,322 or 10% per cent were HIV positive. The number of pregnant women with known HIV positive infection attending ANC for a new pregnancy was 21,869.

An analysis on the number of pregnant women with unknown HIV status attending labour and delivery who were tested in L&D and received their results was not done due to non availability of data as required during this reporting period. This also applied to the analysis of disaggregated data on the number of women with unknown HIV status attending post partum services within 72 hours of delivery who were tested and received results.

3.3.7 Percentage HIV-infected pregnant women assessed for ART eligibility through either clinical staging or CD4 testing

For the year 2009, a total of 47,175 HIV infected pregnant women were assessed for ART eligibility through either clinical staging or CD4 testing. This accounted for 64 per cent of the recorded 74,191 HIV infected pregnant women.

Disaggregated data on the method of assessment, that is, either clinical staging or CD4 testing was not available at the time of reporting.

3.3.8 Percentage of HIV-infected pregnant women who received Antiretrovirals to reduce the risk of mother-to-child transmission

The number of HIV-infected pregnant women who received ARVs to reduce the risk of mother-to-child transmission of HIV in the last 12 months for the period January to December 2009 was 47,175 or 60.9 per cent of the estimated 77,465 HIV infected pregnant women.

Disaggregated data by ARV regimen showed that the number of HIV-infected pregnant women who received 'single-dose Nevirapine only' was 18,198 and 15,734 for 2008 and 2009

respectively. The combination of three prophylactic drugs was 18,166 and 19,934 in 2008 and 2009. See Table 3-13 for further illustration respectively.

Table 3-13: Percentage of HIV-infected pregnant women who received Antiretrovirals to reduce the risk of mother-to-child transmission 2008

		2008	2009
Per centage of HIV-infected pregnant women who received Antiretroviral to reduce the risk of mother-to-child transmission		54.3%	60.9%
Numerator: Number of HIV-infected pregnant women who received antiretroviral during the last 12 months to reduce mother-to-child transmission		41,286	47,175
Disaggregation by ARV regimen	Single-dose Nevirapine only	18,198	15,734
	Prophylactic regimens using a combination of two ARVs	N/A	N/A
	Prophylactic regimens using a combination of three ARVs	18,166	19,934
	ART for HIV-infected pregnant women eligible for treatment	4,922	11,507
Denominator: Estimated number of HIV-infected pregnant women in the last 12 months		76,046	77,465

Source: Monitoring and reporting on the Health Sector response to HIV Annual Reporting 2009; Routine Information, MoH

Table 3-13 above further shows that although the number of HIV infected pregnant women receiving ART for their own health increased from 4,922 to 11,507 for 2008 and 2009 respectively, the proportion based on the estimated HIV-infected women for each period was 5% in 2008 and 16% in 2009.

3.3.9 Percentage of infants born to HIV-infected women (HIV-exposed infants) receiving ARV prophylaxis to reduce the risk for MTCT

In 2008, Zambia reported that 24,026 infants born to HIV-infected mothers receiving antiretrovirals for PMTCT represented 31.6 per cent of the estimated 76,046 HIV-infected pregnant women giving birth. For 2009, there was an increase in the number of infants born to HIV-infected mothers receiving ARVs for PMTCT to 26,743, with a new record of 74,191 HIV-infected pregnant women giving birth. The percentage of infants born to HIV-infected women (HIV-exposed infants) receiving ARV prophylaxis to reduce the risk for MTCT increased to 36 per cent. It has to be noted that Zambia recorded about 50% facility deliveries and this accounts for this low recorded birth rate. See table 3-14.

Table 3-14: Percentage of infants born to HIV-infected women (HIV-exposed infants) receiving ARV prophylaxis to reduce the risk for MTCT – 2009

Category		2009
Per centage of infants born to HIV-infected women (HIV-exposed infants) receiving ARV prophylaxis to reduce the risk for MTCT		36%
Number of infants born to HIV-infected mothers receiving any ARVs for PMTCT		26,743
Disaggregation by regimen	Single-drug ARV	6,250
	Combination of 2 ARVs	20,493
Estimated number of HIV-infected pregnant women giving birth		74,191

Data Source: Routine Programme Information 2009, MoH and Population Projection Report, CSO 2009

Disaggregation by regimen analysis showed that of the total number of infants born to HIV infected mothers receiving any ARVs for PMTCT, 23 per cent or 6,250, were receiving single-drug ARV while the remaining 77 per cent or 20,493 were on a combination of two ARVs. When compared to the previous year (2008), relatively more infants (32 per cent) of the 24,026 infants born to HIV-infected mothers receiving ARVs for PMTCT were receiving single drug ARV, while less (68 per cent) were receiving a combination of two ARVs.

3.3.10 Percentage of infants born to HIV-infected women started on cotrimoxazole (CTX) prophylaxis within the last two months of birth

The percentage of infants born to HIV-infected women started on cotrimoxazole (CTX) prophylaxis within the last two months of birth has increased from the adjusted 29 per cent (or 19,040) of the estimated 65,072 HIV-infected pregnant women giving birth in 2008 to 34 per cent (or 25,139) of the 74,191 pregnant women giving birth in 2009. Table 3-15 illustrates progress made from the last reporting period in 2008 to the current reporting period of 2009.

Table 3-15: Percentage of infants born to HIV-infected women started on cotrimoxazole (CTX) prophylaxis within the last two months of birth from 2008 to 2009

	2008	2009
Percentage of infants born to HIV-infected women started on cotrimoxazole (CTX) prophylaxis within the last two months of birth	29%	34%
Infants receiving cotrimoxazole within 2 months of birth	19,040	25,139
Estimated no. of HIV infected pregnant women giving birth	65,072	74,191

Data source: Routine Programme Information Report, MoH 2009; Health Sector response to HIV and AIDS Annual Report, 2009

3.3.11 Percentage of infants born to HIV-infected women who received an HIV test within 12 months

In 2008, the number of infants born to HIV-infected women who were tested for HIV within 12 months was 20,774 representing 32 per cent of the estimated 65,072 HIV infected pregnant women giving birth. The number of infants tested for HIV increased to 22,114 for the year 2009. This indicated a rise to 30 per cent based on an estimated 74,191 HIV infected pregnant women. Table 3-16 shows changes between 2008 and 2009 in the percentage of infants born to HIV-infected women who had an HIV test within 12 months.

Table 3-16: HIV testing in infants born to HIV-infected women

	2008	2009
Percentage of infants born to HIV-infected women who received an HIV test within 12 months	32%	30%
No. of infants who received an HIV test in their first 12 months	20,774	22,114
Recorded No. of HIV infected pregnant women giving birth	65,072	74,191

Data Source: Routine Programme Information Report, MoH 2009; Health Sector response to HIV and AIDS Annual Report, 2009

Further analysis showed that when disaggregated by exposed infant's first test, of the 22,114 infants who had an HIV test within their first 12 months, the majority (17,377 or 78.6%) had their first virological test in the first 2 months while 4,737 (21.4%) represented those who had their first virological or antibody test between two months and 12 months.

Additional information showed that the number of infants born to HIV-infected women who received an antibody test after their first 12 month was 4,326 in 2009.

Distribution of feeding practices (exclusive breastfeeding, replacement feeding, mixed feeding/other) for infants born to HIV-infected women at DPT3 visit

This indicator was not reported in the 2009 Health Sector Response to HIV and AIDS Annual Report for the reporting period January to December 2008. This was because, previously there had been no mechanism of tracking feeding practices but as indicated in the same report, this position has changed since 2008 as data capturing has been included in the under-five card and registers.

With the above development, the number of infants born to HIV-infected women assessed for and those whose infant feeding practices were recorded at DPT3 at 6 weeks age was 34,018 between January and December 2009. When disaggregated by feeding practices, the majority (29,429 or 86.5%) of infants received exclusive breastfeeding while the remaining 4,589 or 13.5% were on replacement breastfeeding. No data was available for mixed feeding.

Policy and programmatic issues related to women and children

Zambia had a national PMTCT scale-up plan which included clearly defined population based targets of women to be reached at different time points for 2009. The target to be reached with regard to women was 454,000. Equally, the national paediatric HIV care and treatment scale-up plan was in place during the reporting periods. The plan had clearly defined population based targets for children to be reached at different time period. For the period under review, the targeted number of children to be reached was 20,000.

The most commonly used PMTCT ARV regimen during the current reporting period was prophylactic regimens using a combination of two ARVs in line with national guidelines. Approximately 21,301 were for dual (NZP, AZT); 20,080 for single and 5,266 for mother health.

75-100 per cent of the facilities provide ANC services and also provide HIV testing that offer Provider Initiated Testing and Counselling (PITC) with the right to 'opt-out'. An equal proportion of facilities provide ANC services and HIV testing that offer Rapid HIV testing with the same day results. Further, dried blood spot (DBS) technology was available within the country for use in PMTCT and paediatric HIV care programmes.

A number of national policies on the routine offer of testing children were in place for the following settings listed in Figure 3-6.

Figure 3-.6: Setting in which national policies were in place on routine offer of testing children

Other policy and programmatic issues related to women and children showed that, by the end of 2009, HIV information was included on both the maternal and child health cards. In addition, Zambia has guidelines in place in line with international standards for PMTCT, which include the four elements of a comprehensive PMTCT response listed below:

(i) Primary prevention of HIV among women of childbearing age;
(ii) Preventing unintended pregnancies among women living with HIV;
(iii) Preventing HIV transmission from a woman living with HIV to her infants; and

(iv) Providing appropriate treatment, care and support to women living with HIV and their children and families.

The national guidelines on PMTCT were last updated in 2008. The revised guidelines also include the following prongs:

(i) Combination ARV regimens for PMTCT;
(ii) Assessment of eligibility for treatment among HIV-positive pregnant women using both CD4 count exams and clinical staging; and
(iii) Provision of ART for HIV-positive pregnant women who are eligible for treatment.

Treatment

During the implementation of the previous national AIDS plan, HIV treatment, care and support benefitted from substantial resources. ART coverage expanded from 23 per cent in 2003 to 70 per cent in 2009. However, integration with other services has not reached full potential. For example, while TB is a common co-infection with HIV, only 40 per cent of co-infected patients out of 70 per cent expected co-infected patients have been reached.

Due to the rapid scale-up of HIV care and treatment in the country, many patients have resumed active, productive lives with reduction and frequency of illnesses that require in-patient care. HIV and AIDS has transformed from an acute, emergency life-threatening illness to an endemic, manageable chronic disease. As such, HIV control will require health systems that support quality continuity of care and the retention and follow up of patients with multiple and multi-systems diseases such as STIs and TB. (See the section below on Human Resource and Infrastructure.)

While the scale-up of the programme needs to reach 30 per cent of the not-reached population, the treatment and care programme will also need to be strengthened in order to reinforce health and community systems to effectively address the management of the lost-to-follow-up[34], improve the quality of service delivery, provide effective monitoring of drug resistance, and enhance the treatment of the Opportunistic Infections (OIs). In addition, changes to the international treatment guidelines recommend access to treatment earlier in the disease progression. The resulting higher overall demand and initial costs are expected to be balanced by the medium and long-term population benefits.

3.3.12 HIV Treatment: Antiretroviral Therapy - 2008/2009: Percentage of health facilities that offer ART

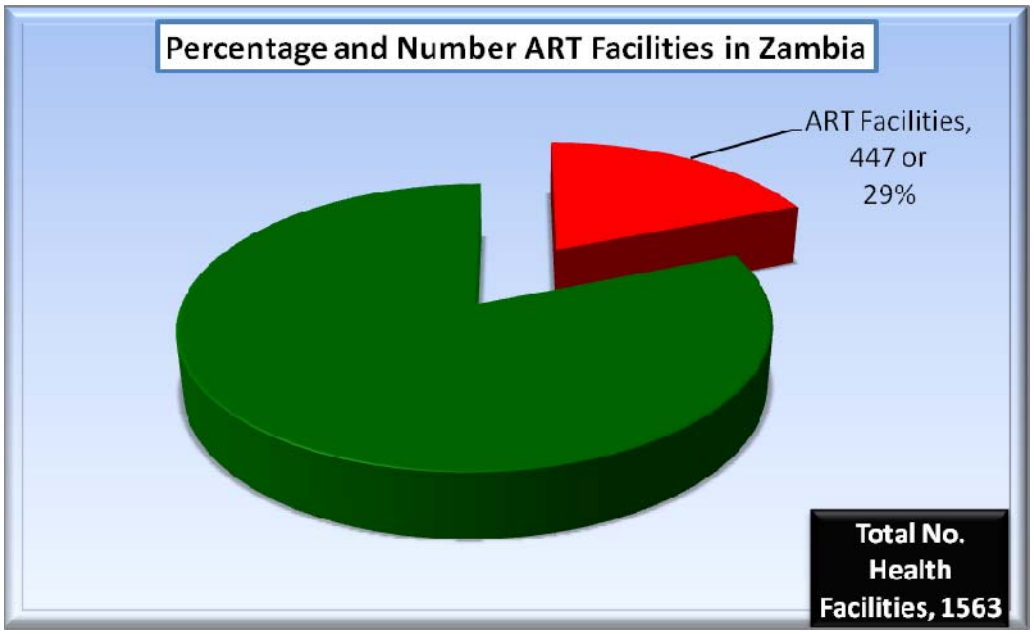
As the HIV pandemic matures, increasing numbers of people are reaching advanced stages of HIV infection. Antiretroviral therapy has been shown to reduce mortality amongst those infected and efforts are being made to make it more affordable within low and middle income countries. Antiretroviral combination therapy should always be provided in conjunction with broader care and support services, including counselling for family care-givers. This indicator

[34] Persons who discontinued treatment or who only seek treatment intermittently.

sets to assess progress towards providing antiretroviral combination therapy to all people with advanced HIV infection

At the end of 2009, Zambia had 447 health facilities that were offering ART (i.e. prescribe and/or provide clinical follow-up) representing an increment from of 115 new facilities since 2008. Based on the Health Institutions of Zambia, 2008 report by the Ministry of Health, the country had 1,563 health facilities, This implies that Zambia now has 29 per cent of the total health facilities offering ART as at the end of 2009.

Figure 3-7: Percentage and number of ART facilities in Zambia, 2009



Source: Health Institutions of Zambia, 2008, MoH and SMARTCARE

A desk reviews at the MoH revealed that there is no specialised health facility in Zambia where ART facilities are not relevant and in future there is a likelihood that all health service delivery points will have ART services.

3.3.13 Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy

The percentage of adults and children with advanced HIV infection receiving antiretroviral therapy was 68 per cent out of an estimated total population of 416,533 who were in need of ART as at December 2009. From an estimated ART need of 382,569 adults over 15 years, 69 per cent were accessing treatment while slightly less (62 per cent) children (less than 15 years) were on treatment out of the estimated 33,964 in need. See Table 3-17 below.

Table 3-17: Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy 2009

2009	All	Male	Female	<15	15+
Value: Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy (Per cent)	68%	69%	68%	62%	69%
Numerator: Number of adults and children with advanced HIV infection who are currently receiving antiretroviral therapy in accordance with the nationally approved treatment protocol (or WHO/UNAIDS standards) at the end of the reporting period	283,863	124,189	159,674	21,120	262,743
Denominator: Estimated number of adults and children with advanced HIV infection	416,533	180,544	235,989	33,964	382,569

Data Source: Ministry of Health ART Programme Monitoring Report, 2009;

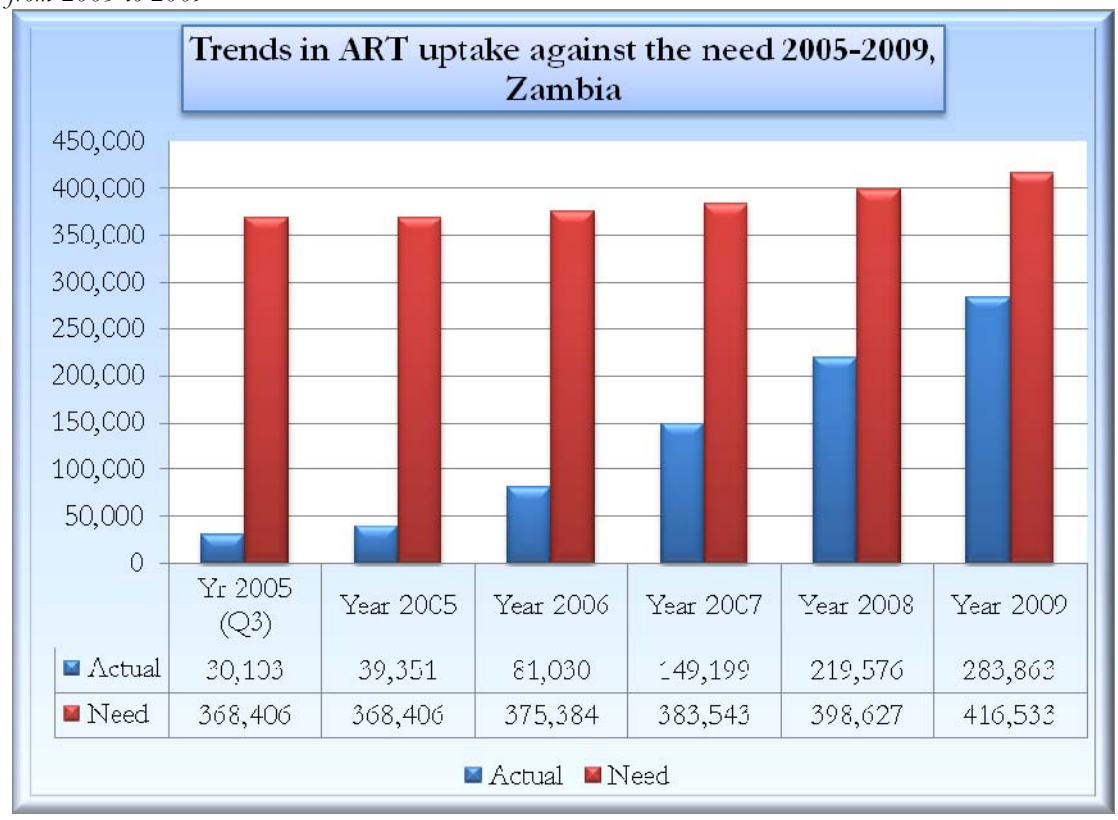
Table 3-17 above further shows that 283,863 adults and children were on ART at the end of December, 2009. Adults accounted for 93 per cent and while children less than 15 years old accounted for 7 per cent. More females (57%) were on ART as compared to males at 43 per cent of the total adults and children on treatment in 2009. Based on disaggregated data by sex, proportionally, slightly more males were accessing ART treatment at 68.8 per cent of the 180,544 males in need as compared to females at 67.7 per cent of the 235,989 females in need.

For 2008, a total of 219,576 adults and children were reported to be on antiretroviral therapy[35]. During this period, twice as more females (145,461) were accessing the treatment than the males (74,115). The number of children who were receiving ART was 18,040 out of the 219,576 total adults and children in 2008.

Since 2005, when Zambia first submitted and reported on the UNGASS Declarations and commitments and also when coincidentally, the national baseline was conducted for adults and children with advanced HIV on ART, more and more people have been put on the programme from 30,103 (baseline) at end of quarter 3 in 2005 to 283,863 at the end of 2009. Equally, the proportion of adults and children on treatment has been increasing over the period, doubling from 10.7 per cent at year end 2005 to 21.6 per cent at the end of 2006 and almost doubling again to 38.9 per cent at the end of 2007. By the end of 2008, 55.1 per cent of the estimated total population in need of treatment was receiving ART and at the end of 2009 this had reached 68 per cent. See Figure 3-8.

[35] Monitoring the Health Sector response to HIV/AIDS Annual Report 2009.

Figure 3-8: Trends in the total number of adults and children on ART as a per centage of the estimated need from 2005 to 2009



Data Source: Zambia HIV and AIDS Epidemiological Projections Report, 2009, Monitoring the Health sector Response to HIV/AIDS Annual Report 2009, Zambia Country Progress Report, 2008, HMIS

The increase in the number of persons with advanced HIV infection and receiving ART is attributed to government and partner efforts in taking ART services as close as possible to those in need.

ART will affect population prevalence and transmission dynamics into the future. The number of adults and children with advanced HIV infection receiving ART increased from 143 in 2003 when the programme was launched[36] to 283,863 by December 2008[37], in accordance with the approved treatment protocol (WHO, 2009 Monitoring Form). 68.1 per cent of the 331,502 people are in need of ART (AIDS projections report 2008). The effect of ART is that HIV prevalence is maintained at a higher level by reducing AIDS-related mortality. Trends in prevalence data then become increasingly difficult to interpret, hence the interest in monitoring HIV incidence.

On the other hand, without ART, viral load and risk of HIV transmission increase steeply at the late stage of infection. ART reduces the infectiousness of sexually active people with advanced HIV infections.

[36] HIV/AIDS projections report 2008.
[37] WHO 2009 Monitoring Form.

The National ART Protocols of 2007 recommend starting treatment at a CD4 count of 200, or between 200-350 if there is more than one clinical stage 3 sign or repeated stage 3 problems. Starting treatment earlier at CD4 count 350 contributes indirectly to HIV transmission reduction by lowering the infectiousness of the patient. There is, therefore, a convergence of individual[38] and population benefit in early recruitment of HIV-positive patients into ART programmes.

3.3.14 Co-Management of Tuberculosis and HIV Treatment (2008/2009) Percentage of estimated HIV-positive incident TB cases that received treatment for TB and HIV

Tuberculosis (TB) is a leading cause of morbidity and mortality in people living with HIV, including those on antiretroviral therapy. Intensified TB case-finding and access to quality diagnosis and treatment of TB, in accordance with international/national guidelines, is essential for improving the quality and quantity of life for people living with HIV. A measure of the percentage of HIV-positive TB cases that access appropriate treatment for their TB and HIV is important. This indicator sets out to assess progress in detecting and treating TB in people living with HIV.

For 2008, the percentages of estimated HIV-positive incident cases that received treatment in accordance with nationally approved treatment protocols and were started on TB treatment in accordance with national TB programme guidelines within the reporting year were 22 per cent for 2006 out of 3,514 estimated number of incident TB cases in people living with HIV and 40.6 per cent of the 16,240 in 2007. This percentage increased to just 41 per cent in 2008 out of the 16,953 estimated incident TB cases in people living with HIV[39]. However, the disaggregation by sex and age was not available at the central level.

Further, at the time of reporting, no data was available for 2009 based on the Ministry of Health Routine Programme Information. Other partners such as the Centre for Disease Control reported that between quarter 1 and 3 of 2009, the estimated HIV-positive incident TB cases that received treatment for TB and HIV had increased to 58 per cent of the 22,812 estimated incident TB cases in people living with HIV. These values for 2009 should however be used with caution as data harmonisation between MoH and partners still remains a challenge, resulting in huge variances on values reported.

IMPACT MITIGATION

3.3.15 Support for Children Affected by HIV and AIDS (2009) Percentage of orphaned and vulnerable children aged 0–17 years whose households received free basic external support in caring for the child

As the number of orphaned and vulnerable children continues to grow, adequate support to families and communities needs to be assured. In practice, care and support for orphaned

[38] Bendavid et al. (2008) found an additional gain in life expectancy of 5.3 months if ART was started at a CD4 count of 350 in an analysis for Southern Africa.

[39] Monitoring and reporting on the Heath Sector Response to HIV/AIDS Annual Report, 2008.

children comes from families and communities. As a foundation for this support, it is important that households are connected to additional support from external sources. This indicator sets out to assess progress in providing support to households that are caring for orphaned and vulnerable children aged 0–17 years.

Percentage of orphaned and vulnerable children aged 0-17 years whose households received free basic external support in caring for the child remains unchanged since the last reporting period at 15.7 per cent out of the 3,651 OVC sampled. The 2007 ZDHS looked at the extent to which free external care and support was received by households which included at least one OVC member. The survey established that at least 80 per cent of children lived in households that did not receive any type of support. Among those that did receive some type of support, the household (8 per cent) was most likely to have received school related assistance. Table 3-18 shows the number of children in the study that received at least one type of support.

Table 3-18: Percentage of OVC aged 0-17 years whose household received free basic external support for child-care

	All
Value: Per centage of orphaned and vulnerable children aged 0-17 whose households received free basic external support in caring for the child	15.7%
Numerator: Number of orphaned and vulnerable children aged 0–17 who live in households that received at least one of the four types of support for each child (answered 'yes' to at least one of questions 1, 2, 3 and 4.) **1.** Has this household received medical support, including medical care and/or medical care supplies, within the last 12 months? **2.** Has this household received school-related assistance, including school fees, within the last 12 months? (This question is to be asked only of children aged 5–17.) **3.** Has this household received emotional/psychological support, including counselling from a trained counsellor and/or emotional/spiritual support or companionship within the last three months? **4.** Has this household received other social support, including socio-economic support (e.g. clothing, extra food, financial support, shelter) and/or instrumental support (e.g. help with household work, training for care-givers, child-care, legal services) within the last three months?	578
Denominator: Number of orphaned and vulnerable children aged 0-17	3,67 1

Data Source: Zambia Demographic Health Survey, 2007

Other findings of the study showed that rural OVC (19 per cent out of 2,015) were more likely than urban OVC (12 per cent of 1,656) to live in household that received some type of support. Orphans and vulnerable children in Lusaka and Northwestern provinces (8 per cent each of 686 and 134 respectively) were least likely to be living in households receiving external support. Children in Western province were the most (46 per cent of 254) likely to be in a household which received some type of support.

This service was delivered through a number of interventions with Home Based Care (HBC) programme taking the lead. The concept of HBC was adopted by the Zambian Government to reduce the socio-economic impact of HIV and AIDS in the workplace, in homes and society in general. Partners involved in providing OVC support include GRZ, CHAZ, ZNAN, RAPIDS, and ZPCT, bilateral and multilateral institutions.

Extended families have provided a massive source of support for many affected children and adults, although this capacity is in many areas stretched to (and even beyond) breaking point. These costs have both short and long-term implications: while the immediate effects often include reduction in consumption, withdrawing pupils from school and deterioration of living standards, children will often live with the consequences of these deprivations into their adult lives.

As part of the government commitment to mitigate the socio-economic impact of HIV and AIDS, the Public Welfare Assistance Scheme was mandated to provide social protection to orphans, among others.

One of the goals of the 2006-2010 NASF is to provide social support services for those made vulnerable by the HIV and AIDS epidemic, such as orphans, vulnerable children, PLHIV and their caregivers. The main strategies to achieve this goal in the NASF are to:

(i) Protect and provide support to orphans and vulnerable children;
(ii) Provide social protection for people made vulnerable by HIV/AIDS; and
(iii) Promote programmes of food security and income/livelihood generation for PLHIV and their care-givers and families.

The National Action Plan for Children in Zambia (2008-2015) launched towards the end of 2007 reported that trends in access to health and education facilities still show that the percentage of households having access to the nearest health care facility or to the nearest basic school is low. A quick review of immediate output indicators suggests that since the launch of the first National Action Plan, concerted efforts are being made in both the education and health sectors.

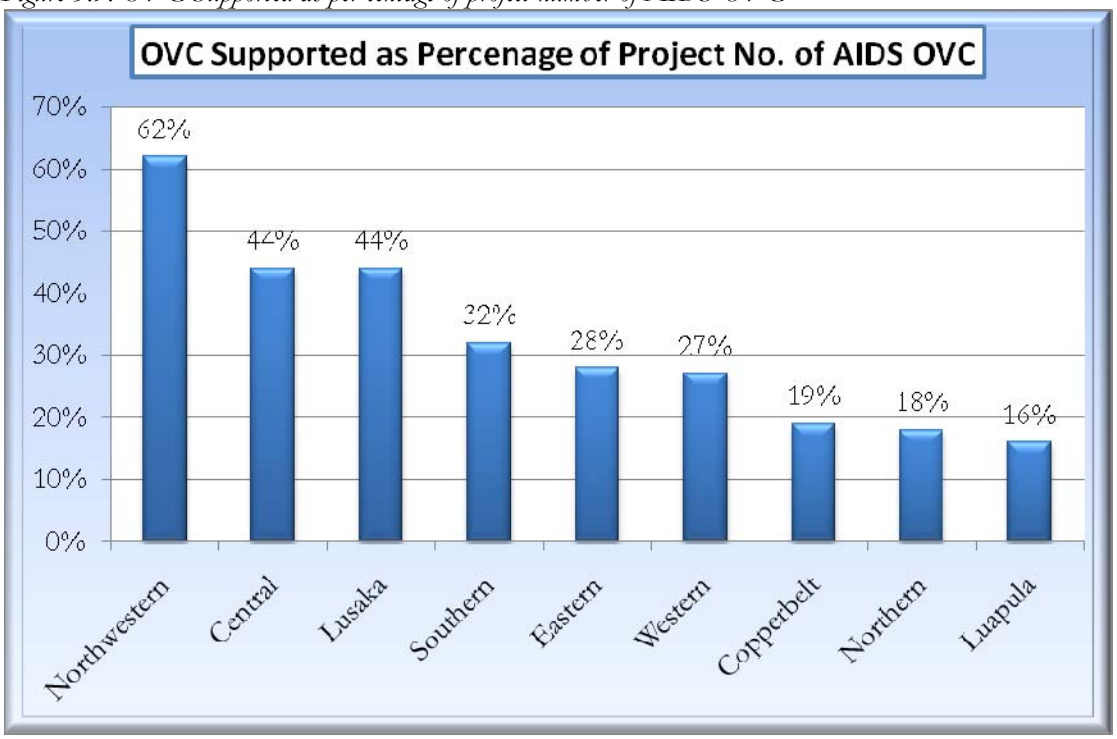
At the programme level, a total of 133,203 male and 133,732 female OVC received care and support and a total of 3,788 CBOs, DPOs, NGOs and FBOs were reported as providing care and support to OVC by the end of 2008. On average almost the same number of female and male OVCs were reached with care and support in 2008. Overall, there was an increase in the number of OVCs supported for care and support in 2008 i.e. from 242,179 in 2007 to 266,935 in 2008[40].

While the ZDHS 2007, reported that 15.7 per cent of OVCs were reached with external support, the routine data monitoring reported a higher proportion, showing that 29 per cent of OVCs were reached with care and support at national level in 2008. According to the NARF, 2008, Northwestern province with 62 per cent represented the highest number of OVCs reached with care and support services. Luapula province had the least number of OVCs in

[40] NAC Activity Reporting Form data Annual Report 2008.

2008 reached for care and support services with 16 per cent of the projected number of OVC. As shown in Figure 3.9 except for Northwestern province, all provinces had less than 50 per cent of the OVCs reached for care and support.

Figure 3.9: OVC Supported as per centage of project number of AIDS OVC



Source: NAC Activity Reporting Form Data Annual Report, 2008

3.3.16 Life-Skills based HIV Education in Schools: Percentage of schools that provided life-skills based HIV education in the last academic year

Life-skills based education is an effective methodology that uses participatory exercises to teach behaviours that help young people deal with the challenges and demands of everyday life. It can include decision-making and problem-solving skills, creative and critical thinking, self-awareness, communication and interpersonal relations. It can also teach young people how to cope with their emotions and causes of stress. When adapted specifically for HIV education in schools, a life-skills based approach helps young people understand and assess the individual, social and environmental factors that raise and lower the risk of HIV transmission. When implemented effectively, it can have a positive effect on behaviours, including delay in sexual debut and reduction in number of sexual partners. This indicator set out to assess progress towards implementation of life-skills based HIV education in all schools.

As at the last reporting period, Zambia had a total of 7,611 basic and high schools of which 7,256 were basic while 355 were high schools. The MoH aims to reach at least 60 per cent of schools with life-skills based HIV and AIDS education. Since 2006, no study has been undertaken to assess the percentage of schools that provide life-skills based HIV and AIDS education within the last academic year.

Case Study 1[41]

In 2009, the Ministry of Education (MoE) conducted an audit to document the current situation in schools regarding the teaching and learning of Life-skills and HIV and AIDS Education. Specific aims of the audit were to:

1. Determine the scope of Life-skills Education provided for learners in grades 1 to 7.
2. Determine the impact of Life-skills Education on learners.
3. Document the strategies and approaches used in teaching and learning of Life-skills Education.
4. Find out the challenges faced by teachers in the teaching and learning of Life-skills.

Five provinces of Zambia's nine were sampled and covered 15 districts and 45 schools. A total of 79 lessons were observed, using a check-list developed to capture seven critical elements of the classroom process.

Lesson observations conducted in all the schools indicated that about two-thirds of the teachers (67 per cent) exhibited an understanding of Life-skills which they were able to apply during lessons. Further, out of 79 lessons observed, 63.3 per cent of them were able to integrate Life-skills and HIV and AIDS in their lessons. However, for most of these, the integration observed was not reflected in the lesson plans that the teachers had prepared.

Urban and peri-urban schools had some Life-skills, HIV and AIDS Education Materials though insufficient in quantities, with the rural schools reporting even fewer copies. Community schools were the most disadvantaged, with very few or no materials on Life-skills or HIV and AIDS. For schools with educational material, many teachers did not refer to or use Life-skills and HIV and AIDS educational materials even where such materials were in stock. Through FGDs, many teachers revealed that they had not been oriented in their use and so did not know how to use the resources.

Other findings showed that many teachers had knowledge about HIV and AIDS but had very little knowledge and information on Life-skills Education. Some teachers who neither comprehended nor used skills to integrate Life-skills into their lessons alluded to the fact that LSE and HIV and AIDS had not been integrated in the teacher training programme. The majority of teachers acknowledged that they did not have problems or difficulties in teaching HIV and AIDS, which were already integrated in the school course books.

The impact of the LSE and HIV and AIDS was that teachers in general, reported that they had noticed a reduction in pregnancies among school going girls. Teachers also observed that the interventions provided for in schools by the Ministry of Education and NGOs were helpful as they helped learners in behavioural change.

[41] Ministry of Health Summary Life-skills and Education Audit Report, 2009.

Learners (youths) observed that early marriages had also reduced amongst their peers and in their communities. Learners reported that they had acquired useful skills which helped them avoid being infected by HIV as many of them had become assertive. They disclosed that the skills they learnt in classes and during extra-curricular activities were very helpful to them. As a result, many learners reported that they were able to undertake Voluntary Counselling and Testing (VCT). Many of them said that they were comfortable with VCT services and welcomed the idea. They wished that all schools in the country could provide the services to learners, teachers and support staff.

[42]A review of the programme data showed that Zambia last reported that a total population of 454,069 young people aged 15-24 years old received life-skills based HIV and AIDS education in 2006. However, caution should be taken when considering this number due to high possibilities in double counting errors. According to the NARF Annual Report, 2008 data on 15-24 year olds receiving life skill based HIV and AIDS education is not cumulative, hence the capture is for a reporting quarter. For the period October to December, 2008, a total of 277,982 (11 per cent) at national level of the 15-24 year olds received life-skills based HIV and AIDS education including through peer education of which 141,984 and 135,998 were male and female respectively. Northwestern province with 20 per cent reached the most number of youths. Overall, there was a drop of 17 per cent in the number of 15 – 24 year olds reached in 2008 as compared to the previous year. However, there was a slight increase in the number of female youths reached. Key issues with life-skill based HIV and AIDS educations in 2008 were as follows:

(i) Generally, fewer youths were reached in the fiscal year, with some provinces having reached as low as 4 per cent of the entire youth population;
(ii) More male 15-24 year olds continued to be reached despite having more female than male youths (Population Projections Report, 2003);
(iii) With reference to the previous reporting period (2007), Copperbelt province reported a sharp decline in the number of 15-24 year olds reached;
(iv) Central, Eastern and Northern provinces continued to reach fewer youths with life-skills based HIV and AIDS education, a similar trend was observed in 2007; and
(v) According to focus group discussions with DATF members in several districts, life-skills based HIV and AIDS education was not taught in a number of schools as it was considered as an extra-curricular activity that calls for extra incentives.

Zambia targets 60 per cent of schools to have teachers trained to teach life-skills based HIV and AIDS education and yet fewer youths are being reached. This gap is evident from the FDGs with DATF members and also from the audit conducted by the MoE (See Case Study above). There was need to enforce the teaching of life-skills in schools as well as to devise other strategies to reach out of school youths. Focus group discussions with key informants at sub-national levels had revealed that the high unemployment levels called for the need to empower youths with life survival skills to minimise the involvement of 15-24 year olds in alcohol abuse and risk sexual behaviour.

[42] NAC Activity Reporting Form Data Annual Report 2008.

3.4 Outcome Programme: Knowledge and Behaviour Change

3.4.1 Orphans: School Attendance (A): Current school attendance among orphans and non-orphans aged 10 –14

AIDS is claiming ever growing numbers of adults at the time when they are forming families and bringing up children. As a result, orphan prevalence is rising steadily in many countries, while fewer relatives within the prime adult ages mean that orphaned children face an increasingly uncertain future. Orphan hood is frequently accompanied by prejudice and increased poverty, factors that can further jeopardise children's chances of completing their education and may lead to the adoption of survival strategies that increase vulnerability to HIV. It is important, therefore, to monitor the extent to which AIDS support programmes succeed in securing the educational opportunities of orphaned children. Orphaned and vulnerable children may be at greater risk of dropping out of school. This can happen for many reasons, such as the inability to pay school fees, the need to help with household labour or to stay at home to care for sick parents or younger siblings. This indicator aims to assess progress towards preventing relative disadvantage in school attendance among orphans versus non-orphans.

According to the Guidelines on Construction of Core Indicators, 2010 Reporting, UNAIDS, the definitions of orphan/non-orphan used here, i.e., child aged 10–14 years as of the last birthday both of whose parents have both died/are both still alive are chosen so that the maximum effect of disadvantage resulting from orphan hood can be identified and tracked over time. The age-range 10-14 years is used because younger orphans are more likely to have lost their parents recently, hence any detrimental effect on their education will have had little time to materialise. However, orphaned children are typically older than non-orphaned children (because the parents of younger children have often been HIV-infected for a short time) and older children are more likely to have left school[43].

For the current reporting period (2008/2009), the school attendance rate of orphans aged 10-14 years who had lost both parents was 85.5 per cent out of the 332 children sampled. When assessed by sex, female orphans (88.6 per cent out of the 162) in this age group were more likely to attend school than males (82.6 per cent out of 170)[44]. This status has not changed since the last reporting.

The most recent data from the Zambia Sexual behaviour Survey indicates that the current school attendance rate for orphans aged 10-14 years who have lost both parents is 81 per cent based on a sample size of 121. Proportionally, more male orphans (82.3 per cent of 62) are more likely to attend school than the proportion of female orphans (79.7 per cent of 59) aged 10-14 who have lost both parents. See Table 3-19.

[43] Guidelines on Construction of Core Indicators, 2010 Reporting, UNAIDS
[44] ZDHS, 2007

Table 3-19 Current School Attendance Rate of Orphans Aged 10-14 Years who have lost both parents

	All	Males	Females
Part A- Current school attendance rate of orphans aged 10-14	81.0%	82.3%	79.7%
Number of children who have lost both parents and who attend school	98	51	47
Number of children who have lost both parents	121	62	59

Date Source: ZSBS 2009 data sets

3.4.2 Orphans: School Attendance (B): Current school attendance rate of orphans aged 10-14 both of whose parents are alive and who live with at least one parent

This indicator assesses the current rate of school attendance for orphans aged 10-14 years whose parents are both alive and who live with at least one parent. Of the 3,113 children whose parents are both alive and who are living with at least one parent, 91.6 per cent attend school. The attendance rate among non-orphan males and non-orphan females was almost the same with males at 91.9 per cent out of 1,620 while females' school attendance rate was 91.2 per cent out of the 1,499 children whose parents are both alive but are living with at least one parent (ZDHS, 2007).

A review of the data sets from the 2009 ZSBS shows that the current rate of school attendance of non-orphans aged 10-14 whose parents are both alive and who live with at least one parent is 88.3 per cent (out of 1,114). When disaggregated by sex, the indications are that the rate of school attendance is higher (90.8 per cent of 547) among female non-orphans aged 10-14 than non-orphan males (86.8 per cent of 566). See table 3-20.

Table 3-20: Current school attendance rate of orphans aged 10-14 both of whose parents are alive and who live with at least one parent

	All	Males	Females
Part B -Current school attendance rate of orphans aged 10-14 both of whose parents are alive and who live with at least one parent	88.3	86.8	90.8
Number of children both of whose parents are alive, who are living with at least one parent and who attend school	984	491	497
Number of children both of whose parents are alive who are living with at least one parent	1,114	566	547

Date Source: ZDHS 2007

Ratio of orphans' school attendance to non-orphans' attendance

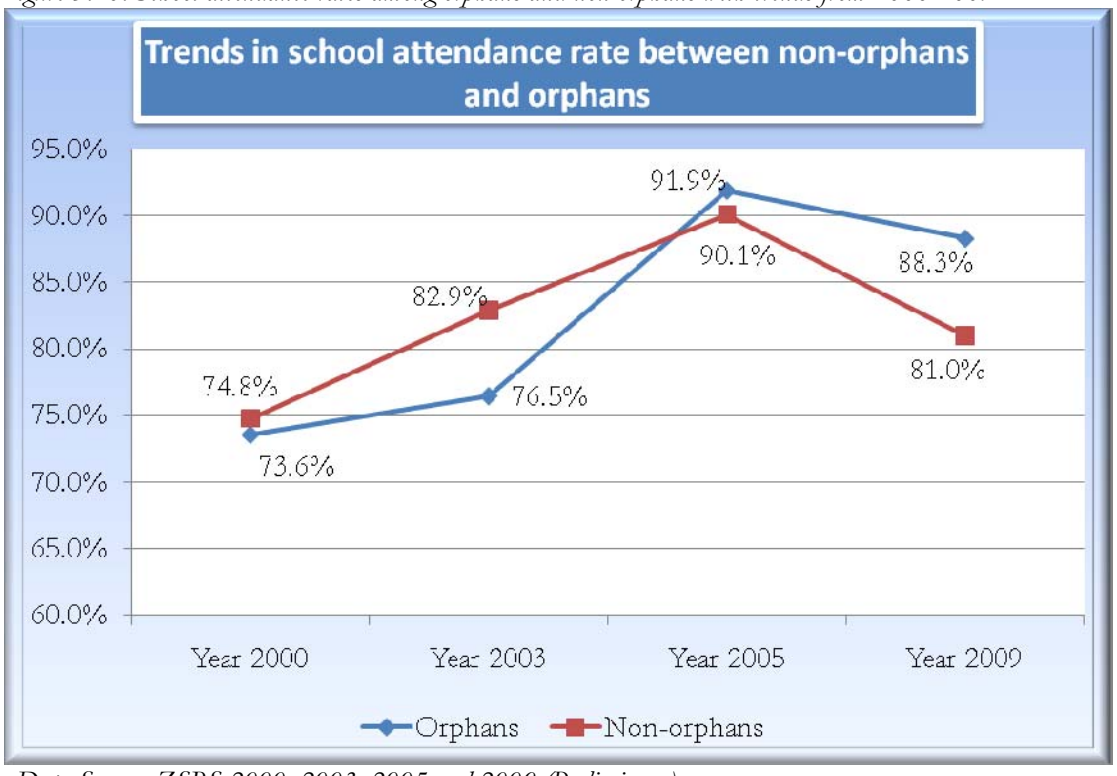
The above two data sets for the rate of school attendance among orphans and non-orphans were used to establish the ratio of orphan school attendance to non-orphans school attendance. Thus, the school attendance ratio of orphans aged 10-14 years who have lost both parents and attend school to non-orphans of the same age group whose parents are both alive

and live with at least one parent is 0.93[45]. When assessed by sex, the school attendance ratio of male orphans to non-male orphans both aged 10-14 years is 0.9, while for females, it is higher at 0.97.

Trends in the rate of school attendance among orphans aged 10-14 years and non-orphans in the same age group were also assessed. While the ZDHS was used to inform the current situation on orphan school attendance, the ZSBS which is conducted more frequently than the DHS is used for trend analysis. Zambia has been monitoring the orphan school attendance indicator since 2000 and has two more (2003 and 2005) data sets after and another set from the 2009 preliminary report for this purpose.

An analysis of trends in the rate of school attendance among orphans aged 10-14 years who had lost both parents, showed an increasing rate from 73.6 per cent out of 72 children who had lost both parent in 2000 to 76.5 per cent (out of 154) in 2003 before peaking in 2005 at 91.9 per cent (out of 99) in 2005. In 2009, the rate of school attendance among orphans aged 10-14 who had lost both parents dropped to 81.0 per cent. Figure 3.10 shows similar trends in the rate of school attendance among non-orphans whose parents are both alive and live with at least one parent. The rate of school attendance among non-orphans increased from 74.8 per cent in 2000 to 82.9 per cent in 2003 and peaking at 90.1 per cent also in 2005 before dropping to 81.8 per cent in 2009. The sample sizes of non-orphans in the ZSBS were 966 (2000); 1,459 (2003); 1,223 (2005) and 1,114 (2009).

Figure 3.10: School attendance rates among orphans and non-orphans with trends from 2000-2009



Data Source: ZSBS 2000, 2003, 2005 and 2009 (Preliminary)

[45] Zambia Demographic Health Survey, 2007.

Incidentally, while there was an almost equal (74.8 per cent and 73.6 per cent) rate of school attendance for non-orphans and orphans, respectively in 2000, the non-orphans rate of school attendance increased to 82.9 per cent in 2003 as compared to 76.3 per cent for the orphans. At the peak, the rate of school attendance for both orphans and non-orphans in 2005 was almost equal (91.9% and 90.1%) respectively. However, in 2009, it was noted that the rate of school attendance for orphans was higher (88.3 per cent) than the non-orphans (81 per cent)

3.4.3 Young People: Knowledge about HIV Prevention: Percentage of young people aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission

HIV epidemics are perpetuated through primarily sexual transmission of infection to successive generations of young people. Sound knowledge about HIV among young people aged 15-24 years, like for the general population is an essential pre-requisite, albeit, often an insufficient condition, for adoption of behaviours that reduce the risk of HIV transmission. This indicator sets out to assess progress towards universal knowledge of the essential facts about HIV transmission among young people aged 15-24 years.

HIV among adults is mainly transmitted through heterosexual contact between an HIV-positive partner and an HIV-negative partner. Zambia's HIV-prevention programme has sought to reduce sexual transmission of the virus by programmatically promoting three behaviour change models, sexual abstinence, mutually faithful monogamy among uninfected couples and condom use for people not practicing abstinence. In the 2007 ZDHS, men and women were asked if it is possible to reduce the risk of acquiring HIV through consistently using condoms, limiting sexual intercourse to one uninfected partner who has no other sex partners and abstaining from sexual intercourse. The respondents were also asked about major misconceptions, including that a healthy looking person can have HIV and a person can get HIV from a mosquito bite. Disaggregated data by age for this indicator included the age group 15-24 years.

Table 3.14 below shows that overall, 35.3 per cent of the total 5,426 young men and women aged 15-24 exhibited comprehensive knowledge (by answering correctly all the five questions) about HIV by both correctly identifying ways of preventing the sexual transmission of HIV and rejection of major misconceptions about HIV transmission. Young men had a slight edge over the women for each respective age group. Young men of 15-24 years had more comprehensive knowledge on HIV with 36.9 per cent of the 2,482 as compared to young women in the same age group with only 34 per cent of the 2,944 in the sample.

The table below further shows that, the age group 20-24 years were the most (39.5 per cent) comprehensively knowledgeable about ways to prevent HIV transmission and reject major misconceptions among young people in the sample while the young women aged 15-19 years had the least (32.3 per cent) comprehensive knowledge.

The description above is further illustrated in Table 3.14 below, showing disaggregated values by age and sex for young people between 15-24 years and knowledge levels for comprehensive and partially, that is, for each individual question of the five.

Of the five questions posed in the survey, over 80 per cent of young people 15-24 years gave correct answers to questions (1) the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?, (3) a healthy-looking person having HIV? and (5) a person can get HIV from sharing food with someone who is infected.

Table 3-21 Percentage of young people aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission

2009							
		All	15-19	20-24	All	15-19	20-24
Percentage of females and males aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (that is, who gave correct answers to all 5 questions below	35.3%	36.9%	35.0%	39.5%	34.0%	32.3%	36.0%
Percentage of respondents who gave a correct answer to question 1 (Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?)	86.5%	86.3%	84.9%	88.1%	86.6%	83.0%	90.7%
Percentage of respondents who gave a correct answer to question 2 (Can a person reduce the risk of getting HIV by using a condom every time they have sex?)	72.4%	74.1%	73.0%	75.6%	71.0%	66.5%	76.3%
Percentage of respondents who gave a correct answer to question 3 (Can a healthy-looking person have HIV?)	82.2%	84.2%	82.3%	86.7%	80.5%	78.8%	82.5%
Percentage of respondents who gave a correct answer to question 4 «Can a person get HIV from mosquito bites?)	66.4%	66.8%	66.9%	66.7%	66.1%	67.7%	64.3%

Percentage of respondents who gave a correct answer to question 5 (Can a person get HIV from sharing food with someone who is infected ?)	82.9%	84.2%	83.9%	84.5%	81.8%	82.2%	81.3%
Number of all respondents age 15-24	5,426	2,482	1,416	1,066	2,944	1,574	1,370

Data Source: ZDHS 2007

The exception to the above description was for the female age group, 15-19 years, which was less than 80 per cent or just 78.8 per cent who gave the correct answer to the question 'Can a healthy-looking person have HIV?' The least knowledge was for question 4 'Can a person get HIV from mosquito bites?', were only between 64.3 per cent and 67.7 per cent of young people 15-24 years who gave a correct answer.

3.4.4 Most-at-risk Populations: Knowledge about HIV Transmission and Prevention: Percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission

Although Zambia has a generalised hyper-epidemic, the country contains some concentrated sub-epidemics which are generally driven by sexual transmission or use of contaminated injecting equipment. One of the MARPs that Zambia has been monitoring through partners is Female Sex Workers and Long Distance Truck Drivers. Sound knowledge about HIV and AIDS is an essential prerequisite if people are going to adopt behaviours that reduce their risk of infection. Most-at-risk populations are often difficult to reach with HIV prevention programmes. However, in order to prevent the spread of HIV among these populations as well as into the general population, it is important that they access these services. Although Zambia has a generalised epidemic the target for this indicator was female sex workers only, who are considered among some of the most-at-risk populations.

This indicator was collected through a desk review of round 4 behaviour surveillance surveys conducted by Corridors of Hope (COH) project in selected sites/districts. MARPs covered in the BSS include Female Sex Workers (FSWs). In each survey round, FSWs are asked a series of questions regarding knowledge of HIV transmission and prevention. A combination of responses were used to determine levels of accurate knowledge of the transmission and prevention of HIV by ascertaining those that correctly identified ways of preventing sexual transmission and rejecting major misconceptions about HIV transmission.

Knowledge about HIV and its prevention saw an increasing trend. The proportion of FSWs with a complete knowledge about HIV prevention (abstinence, being faithful and condom use) had increased by 2009. The proportion of FSWs with comprehensive knowledge (a complete knowledge of prevention methods and no misconception about HIV transmission) had also increased by 2009

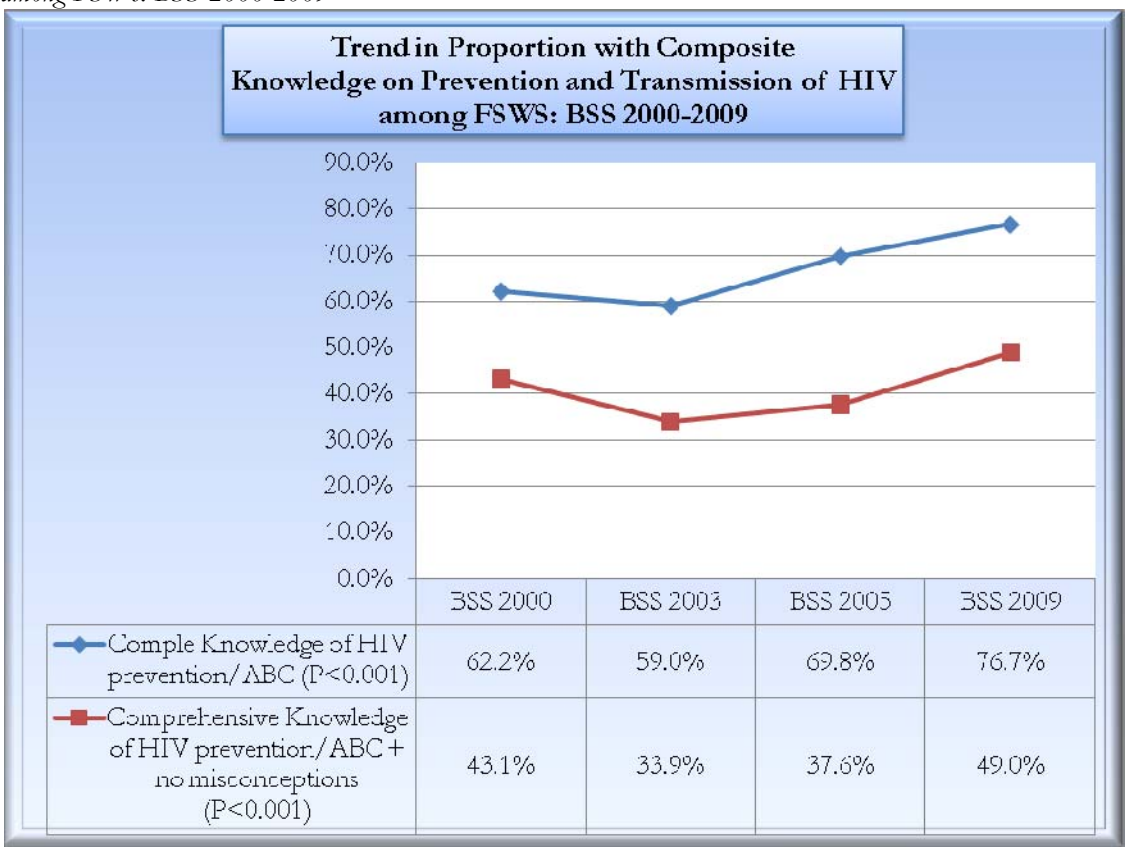
In general, complete knowledge, defined as knowing that abstinence, being faithful and using condoms prevents HIV, increased significantly from 62.2 per cent in 2000 to 76.7 per cent in

2009, this change was statistically significant (p<0.001). There was a statistically significant increase in comprehensive knowledge among FSWs.

Comprehensive knowledge of HIV was defined as knowing the ABC of prevention without misconceptions. The proportion increased significantly from 43.1 per cent in 2000 to 49.0 per cent in 2009, (p<0.001).

BSS track trends in behavioral variables that affect the course of the HIV epidemic. The proportion of FSWs with secondary or higher educational levels is high, a situation that is likely to promote the acquisition of and assimilation of HIV and AIDS information. Although awareness about condoms is now universal, the use of condoms leaves much to be desired. Some of the FSWs still harbour some myths about the transmission of HIV and AIDS. It is very likely that these misconceptions play a major role in hampering the use of condoms and thus reduce the chances of FSWs protecting themselves against the sexual transmission of infections including HIV. Condom use with paying partners has increased and so has condom use with non-paying partners. There is need for interventions which address the conditions and context of sex work, including targeted condom promotion and distribution and skills development such as condom negotiation. Figure 3-11 below shows trends in knowledge about HIV transmission and rejecting major misconceptions among sex workers.

Figure 3-11: Trends in Proportion with Composite Knowledge on Prevention and Transmission of HIV among FSWs: BSS 2000-2009



	BSS 2000	BSS 2003	BSS 2005	BSS 2009
Comple Knowledge of HIV prevention/ABC (P<0.001)	62.2%	59.0%	69.8%	76.7%
Comprehensive Knowledge of HIV prevention/ABC + no misconceptions (P<0.001)	43.1%	33.9%	37.6%	49.0%

Data Source: BSS 2009, Corridors of Hope

3.4.5 Sex Before the Age of 15 - Percentage of young women and men aged 15–24 who have had sexual intercourse before the age of 15

One of Zambia's major goals in the response to HIV and AIDS is to delay the age at which young people first have sex and discourage premarital sexual activity because it reduces their potential exposure to HIV. There is also evidence to suggest that having sex at a later age reduces susceptibility to infection per act of sex, at least for women. This indicator sets out to assess progress in increasing the age at which young women and men aged 15 –24 first have sex.

Findings based on the recent ZSBS 2009, shows more females were likely to delay their sexual debut than the males among the 15-24 years age group in the survey. For the males 15-24 years, 8.2 per cent reported that they have had sexual intercourse before the age of 15. For females in the same age group, 6.8 per cent reported having had sex before the age of 15. The highest proportion of young people who have had sex before the age of 15 years, were males in the age group 15-19 years with 9.0 per cent. Similarly, the female category in the age group 15-19 was the highest with 7.2 per cent of the 297 females in the sample but dropped to 6.4 per cent (out of 419) for the 20-24 years.

Table 3-22: Percentage of young women and men aged 15-24 years who have had sexual intercourse before the age of 15

	15-24	**15-19**	**20-24**	**15-24**	**15-19**	**20-24**
Percentage of young women and men aged 15–24 who have had sexual intercourse before the age of 15	8.2%	9.0%	7.1%	6.8%	7.2%	6.4%
Number of respondents (aged 15–24 years) who report the age at which they first had sexual intercourse as under 15 years	60	39	27	59	32	27
Number of all respondents aged 15–24 years	732	435	297	862	443	419

Data Source: ZSBS 2009, CSO.

An assessment of the data sets from the ZDHS 2007 shows a similar pattern. More males (16 per cent of the 2,482 sampled) of 15-24 years reported that they have had sexual intercourse before the age of 15 while females reported from the same age group was 13.5 per cent from the 2,944 sampled.

Early sexual debut is often a risk factor for HIV infection, since early timing of first sex, often before marriage, may increase the chance of having many sexual partners during a lifetime. The promotion of abstinence and delay of sexual debut among adolescents has received strong emphasis in HIV prevention efforts in Zambia.

3.4.6 Higher-risk Sex - Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the last 12 months

The spread of HIV largely depends upon unprotected sex among people with a high number of partners. Individuals who have multiple partners (concurrently or sequentially) have a higher risk of HIV transmission than individuals who do not link into a wider sexual network. This indicator sets out to assess progress in reducing the percentage of people who have higher-risk sex.

The most recent data on this indicator was obtained from the 2009 ZSBS data using a statistical package, STATA version 10. A series of retrospective questions on sexual activity in the 12 months prior to the survey were asked of all survey respondents aged 15-49.

Overall, 7.1 per cent of the 2,904 total population of young men and women 15-49 years in the survey reported that they had sexual intercourse with more than one partner in the last 12 months. More males (9.1 per cent of the 1,325) indicated that they had sexual intercourse with more than one partner than women (1.1 per cent of the 1,579). Table 3-23 below shows a similar trend for the urban-rural men behavior to the urban-rural women where men were more likely to have sexual intercourse with more than one partner in the last 12 months. However, while there was no difference between rural and urban females with both at 1.1 per cent, findings showed that rural men (14.5 per cent of 860) reported having had sex with more than one partner than the urban (8.8 per cent out of 456).

Table 3-23: Percentage of women and men aged 15-49 who have had sexual intercourse with more than one partner in the last 12 months

Item Description							
		All	Rural	Urban	All	Rural	Urban
Percentage of women and men aged 15-49 years who have had sexual intercourse with more than one partner in the last 12 months	7.1%	9.1%	14.5%	8.8%	1.1%	1.1%	1.1%
Number of respondents aged 15-49 years who have had sexual intercourse with more than one partner in the last 12 months	206	189	125	41	17	6	11
Number of all respondents aged 15-49 years	2,904	1,325	860	456	1,579	548	1,031

Data Source: ZSBS 2009

Based on the ZDHS 2007, it was observed that the percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the last 12 months was 26.6 per cent from a sample size of 9,673. Slightly more than double (38.3 per cent of 4,371) the proportion of males had sexual intercourse with more than one partner in the last 12 months as compared to females (16.9 per cent of 5,302).

3.4.7 Condom Use during Higher-risk Sex - Percentage of women and men aged 15-49 who had more than one partner in the past 12 months who used a condom during their last sexual intercourse

Condom use is an important measure of protection against HIV, especially among people with multiple sexual partners. Among those that reported sex with more than one sexual partner, information on condom use at last sex was collected by the ZSBS 2009 and used to generate this indicator by the level of disaggregation required. This indicator sets out to assess progress towards preventing exposure to HIV through unprotected sex with non-regular partners.

The most recent data sets for this indicator were from the ZSBS 2009. However, when assessment of the disaggregated indicators according to the reporting requirement was conducted, the denominator values obtained fell below 25 and are statistically considered unweighted cases. They could therefore, not be included comprehensively. This was more evident with data disaggregation among all females. However, of the 166 males 15-49 years who had more than one partner in the past 12 months, only 19.8 per cent used a condom during their last sexual intercourse. Further, when disaggregation by rural-urban location, the urban males who reported having had sexual intercourse with more than one partner were more likely (20.0 per cent of 55) to use a condom than the rural males (17.2 per cent of 151) of higher risk sex. This is despite the fact that more rural men reported to have had sexual intercourse with more than one partner than the urban males (see previous indicator). There is need to strengthen condom promotion programmes in the rural areas and further make condoms more accessible to the rural males.

To assess condom usage during higher-risk sex among women and the general population 15-49 years, the ZDHS 2007 data was used once again since the ZSBS could not sufficiently inform the review of this indicator in full.

The report indicated that overall, 45.6 per cent of the 2,551 women and men 15-49 years who had sexual intercourse with more than one partner reported using a condom during their last sex. More males (50 per cent of 1,655) were likely to use a condom than women (37.4 per cent of the 896) among young men and women involved in higher-risk sex.

Table 3-24: Percentage of female and male in the general population 15-49 years reporting the use of a condom with their most recent client

	All	Male (15-49)	Females (15-49)
Percentage of female and male in the general population 15-49 years reporting the use of a condom with their most recent client	45.6%	50.0%	37.4%
Number of female and male general population 15-49 years reporting the use of a condom with their most recent client	1,162	827	335
Number of female and male general population 15-49 years who reported having commercial sex in the last 12 months	2,551	1,655	896

Data Source: ZDHS 2007

The maximum protective effect of condoms is achieved when their use is consistent rather than occasional. The current indicator does not provide the level of consistent condom use. However, the alternative method of asking whether condoms were always/sometimes/never used in sexual encounters with non-regular partners in a specified period is subject to recall bias. Furthermore, the trend in condom use during the most recent sex act will generally reflect the trend in consistent condom use.

[46]At programme level, desk review showed that a total of 13,553,418 male condoms against 442,785 female condoms were distributed in 2008 from 15,252 condom outlets providing condoms to end users throughout the country.

Of the total condoms distributed, 5,936,750 male and 369,465 female condoms were distributed from non-health facilities in 2008. This indicated that the total condom distribution from the non health facilities had dropped by 46 per cent in 2007 and a further 10 per cent in 2008. However, there was an increase of over 100 per cent in the number of female condoms distributed from non-health facilities. The drop was due to a reduction in male condom distribution in this fiscal year.

Conversely, 7,616,668 male and 73,320 female condoms were distributed from health facilities in 2008 and this represented a 13 per cent increase in the total number of condoms distributed through health facilities during this reporting period. However, there was a drop in the number of female condoms distributed from the health facilities in this fiscal year. Some of the highlights of condom distribution in this reporting period were as follow:

(i) Total condom distribution had declined in the past two years. However, female condom distribution had improved from the non-health facilities as opposed to the health facilities;
(ii) Southern province distributed the largest number of male condom from non-health facilities while Lusaka province distributed the largest number of female condoms from non-health facilities;
(iii) Copperbelt province distributed the largest number of male condoms from health facilities, while Southern province distributed the largest number of condoms from health facilities;
(iv) Coverage of condom distribution among the sexually active population (15-49 year olds) was extremely low with a national coverage of 2 per cent;
(v) Limited availability of female condoms and in some districts, limited availability of male condoms continued to pose distribution challenges across the country; and
(vi) There was a strong link between condom service outlets and the number of condoms distributed, i.e., districts with the most outlets distributed the most condoms.

The number of female condoms distributed through both non-health and health facilities were extremely very low although some improvement was reported in 2008. Most of the female condoms distributed to end users in this fiscal year were through the non-health facilities. Therefore, there was need to promote female condom distribution through reproductive

[46] NARF Annual Report 2008, NAC

health programmes in the health facilities. Some of the challenges with condom distribution were cited as follow:

(i) Limited advocacy and promotion of female condom use at all levels;
(ii) Generally, limited sources, especially for female condoms in the rural settings; and
(iii) Myths surrounding condom use as revealed by focus group discussions with community members.

3.4.8 Sex Workers: Condom Use - Percentage of female and male sex workers reporting the use of a condom with their most recent client

Various factors increase the risk of exposure to HIV among sex workers, including multiple, non-regular partners and more frequent sexual intercourse. However, sex workers can substantially reduce the risk of HIV transmission, both from clients and to clients, through consistent and correct condom use. This indicator sets out to assess the percentage of female sex workers reporting the use of a condom with their most recent client. The Behavioural Surveillance Surveys conducted by CoH do not include male sex workers.

The 2009 ZBSS Round 4 for FSW reports that 79.1 per cent of the 1,614 female sex workers in the survey reported that they used a condom with their most recent partner. FSWs 25 years and above had a slight edge (80.2 per cent of 862) than those less than 25 (79.1 per cent of 752) on the likelihood of using a condom.

Table 3-25: Percentage of female and male sex workers reporting the use of a condom with their most recent client

Percentage of female and male sex workers reporting the use of a condom with their most recent client	79.7%	79.1%	80.2%
Number of female and male sex workers reporting the use of a condom with their most recent client	1,286	595	691
Number of sex workers who reported having commercial sex in the last 12 months	1,614	752	862

Data Source: 2009 BSS Round 4

The survey which was conducted in four districts showed that FSWs from Chirundu District were the most (87 per cent of 270) likely to use a condom with their most recent client while a very little difference was observed among the other three districts which showed that 79.1 per cent, 78.9 per cent and 78.2 per cent of (564, 270 and 435) FSWs from Solwezi, Kapiri Mposhi and Livingstone, respectively used a condom with their most recent client.

Although awareness about condoms is now universal, the use of condoms leaves much to be desired. Some of the FSWs still harbour some myths about the transmission of HIV and AIDS. It is very likely that these misconceptions play a major role in hampering the use of condoms and thus reduce the chances of FSWs protecting themselves against the sexual transmission of infections including HIV. The reported history of STIs has remained high among the FSWs population and this calls for more efforts towards STI prevention measures.

Fortunately, the proportion of those undergoing voluntary HIV counselling and testing appears to be high. HIV counselling and testing need to be promoted and efforts sustained to ensure that those in need of care and treatment services are identified and provided with a continuum of care. The trends data show very positive changes towards risk reduction. Condom use with paying partners has increased and so has condom use with non-paying partners. There is need for interventions which address the conditions and context of sex work, including targeted condom promotion and distribution and skills development such as condom negotiation.

3.5 Impact Indicator

3.5.1 Reduction in HIV Prevalence - Percentage of young people aged 15–24 who are HIV-infected

The goal in the response to HIV is to reduce HIV infection. As the highest rates of new HIV infections typically occur in young adults, more than 180 countries have committed themselves to achieving major reductions in HIV prevalence among young people, a 25 per cent reduction in the most affected countries by 2005 and a 25 per cent reduction globally by 2010. This indicator sets out to assess progress towards reducing HIV infection.

According to the ANC Sentinel Surveillance survey 2006, 14.6 per cent of young people aged 15-24 were HIV-infected based on 6,807 antenatal attendees (aged 15-24) tested for their HIV infection status. The infection rate was higher among the 20-24 age group at 16.8 per cent (out of 4,174) as compared to 8.6 per cent (out of 2,633) for the 15-19 age group.

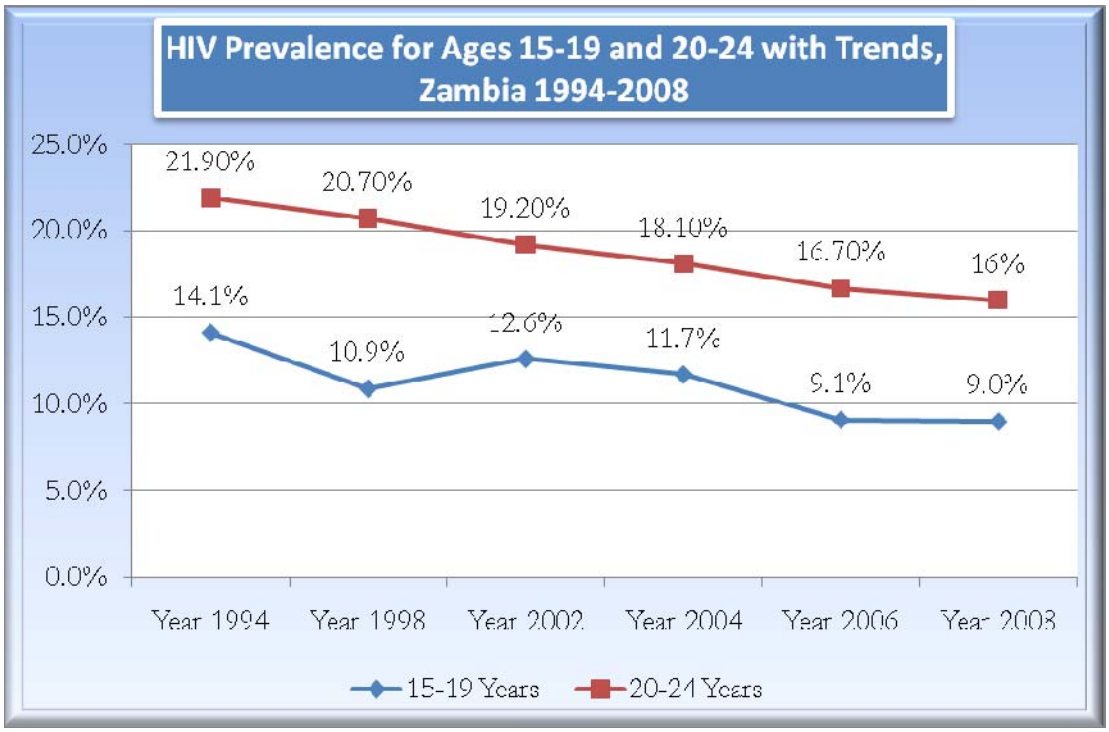
Table 3-26: Percentage of young people aged 15-24 who are HIV-infected

		15-19	**20-24**
Percentage of young people aged 15-24 who are HIV-infected	14.6%	8.6%	16.8%
Number of antenatal clinic attendees (aged 15-24) tested whose HIV test results are positive	992	234	758
Number of antenatal clinic attendees (aged 15-24) tested for their HIV infection status	6,807	2,633	4,174

Data Source: 2006 Antenatal Clinic Sentinel Surveillance Survey

Preliminary data from the 2008 ANC Sentinel Surveillance Survey indicate that the HIV prevalence for the antenatal attendees aged 15-24 will be within the same rate at 9 per cent for the age group 15-19 and at 16 per cent for the age group 20-24. Since 1994, HIV infection for this age group has shown a downward trend, dropping from 21.9 per cent to 16 per cent in 2008 for the age group 20-24 years. For the 15-19 year olds, the rate of infection has also had a downward pattern from 14.1 per cent in 1994 to 10.9 per cent in 1998. However, in 2002 the infection rate for this age group rose to 12.6 per cent and then maintained the downward trend dropping to 11.7 per cent in 2004 and then to 9.1 per cent in 2006 and to 9 per cent in 2008.

Figure 3.12: HIV Prevalence for Ages 15-19 and 20-24 with Trends, Zambia 1994-2008



Data source: Preliminary data sets 2008 ANC Surveillance Survey

3.5.2 Most-at-risk Populations: Reduction in HIV Prevalence - Percentage of most-at-risk populations who are HIV-infected

Most-at-risk populations typically have the highest HIV prevalence in countries with either concentrated or generalised epidemics. In many cases, prevalence among these populations can be more than double the prevalence among the general population. Reducing prevalence among most-at-risk populations is a critical measure of a national-level response to HIV. In Zambia, this indicator focuses on sex workers and in particular females, which is monitored through one of the partners. There is limited data on IDU and MSMs in the country. This indicator sets out to assess progress on reducing HIV prevalence among most-at-risk populations (female sex workers).

The percentage of female sex workers who are HIV-infected is 65.4 per cent from a sample size of 284 and based on the 2005 Biological and Behavioural Survey by Corridors of Hope. This survey was conducted in Ndola, one of the sites for the Corridors of Hope Project. The survey neither disaggregated nor reported data by age or gender. No male sex workers were targeted during this survey. The 2008 Bevahioural Survey did not include the biological component.

The 65.4 per cent HIV prevalence among females imply that for every three female sex workers, two are infected. However, it should be noted that the survey targeted only one

district which has a high concentration of female sex workers. The HIV prevalence, therefore, may have some biases and cannot be generalised.

Table 3-27: Percentage of female sex workers who are HIV-infected

	All FSW
Percentage of female sex workers who are HIV-infected	65.4%
Number of females sex workers tested whose HIV test results are positive	176
Number of female sex workers tested for their HIV infection status	284

Data Source: Behavioural and Biologic Surveillance Survey in Ndola city, Zambia (Among Female Sex Workers), 2005. Study did not target any male sex workers and data was not disaggregated by age

3.5.3 HIV Treatment: Survival after 12 Months on Antiretroviral Therapy – 2009

Percentage of adults and children with HIV known to be on treatment (12, 24, 36, 48, 60) months after initiation of antiretroviral therapy

One of the goals of any antiretroviral therapy programme is to increase survival among infected individuals. As provision of antiretroviral therapy is scaled up in countries around the world, it is also important to understand why and how many people drop out of treatment programmes. These data can be used to demonstrate the effectiveness of those programmes and highlight obstacles to expanding and improving them. This indicator sets out to assess progress in increasing survival among infected adults and children by maintaining them on antiretroviral therapy.

Not much has been documented with regard to survival rates on ART, although attempts have started in earnest to try and come up with such figures, which are important in assessing the performance of the ART programme. Emphasis has been place a lot on coverage resulting from the politically driven need to scale up the programme. Figures presented for ART survival in this report were based on segmented data from some selected sites (AIDSRelief, CIDRZ and CHAZ) and may have some biases and cannot be generalised. A lot of data so far has been collected, especially from the SmartCare programme. Unfortunately, there are deficiencies in terms of capacity to handle this data, especially at national level where it is supposed to be consolidated and analysed.

[47]Overall, 71.1 per cent of the total 260,440 adults and children with HIV were known to be on treatment 12 months after initiation of the ART. However, when assessed by age, 69.2 per cent of the 144,968 adults were alive 12 months after being initiated on ART. Survival for children was lower by 10 per cent and showing that 58.4 per cent were alive 12 month later. The data was not disaggregated by sex.

The assumption for the survival rate here is that patients need not have been on antiretroviral therapy continuously for the 12-months period. Patients who may have missed one or two

[47] The Impact of ART and PMTCT services in Zambia using the treatment survival rates and new infections averted from mother-to-child study, NAC 2010.

appointments or drug pick-ups, and temporarily stopped treatment during the 12 months since initiating treatment but were recorded as still being on treatment at month 12 were included in the numerator. On the contrary, those patients who have died, stopped treatment or been lost to follow-up at 12 months since starting treatment are not included in the numerator.

The study observed that the transfers out from AIDS Relief were increasing with passage of time. This could be due to the expansion of the ART programme so that patients were transferred to newly established centres closer to their residence and were therefore, not included in the assumption. Churches Health Association of Zambia sampled a total of 1,347 patient records from nine of its facilities in the nine provinces of Zambia to review the survival rate on ART at 12 months. The 12 months survival rate was found to be 86.6 per cent (CHAZ 2010).

[48]To assess the ART survival by sex, the CIDRZ routine ART information was assessed. In 2009, a total of 21,404 adults and children with HIV, known to be on treatment 12 months after initiation of ART out of a cohort of 31,231 were alive. This represents 69 per cent of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy but falls short of the 88.7 per cent and 89.6 per cent achieved for 2007 and 2006. The highest survival rate was among women at 71 per cent and this trend has remained consistent since the last reporting period where women survival was higher at 89.9 per cent in 2007 and 90.7 per cent in 2006 as compared to men at 65 per cent, 87 per cent and 87.8 per cent respectively. Further assessment shows that survival for children under 15 years was higher at 69 per cent while for those above 15 years, 64 per cent were surviving 12 months later. See Table 3-28 below.

Table 3-28 Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy – 2009

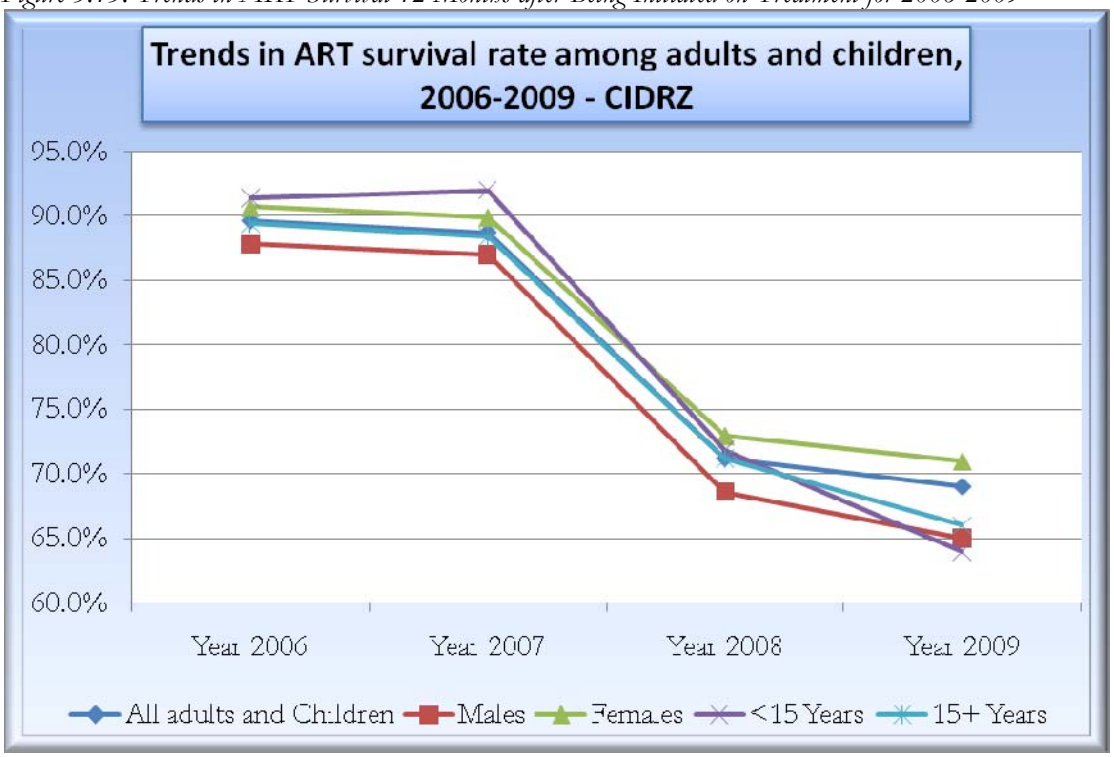
2009	All	Males	Females	<15	15+
Percentage of adults and children with HIV known to be on treatment 12 months after initiating antiretroviral therapy	69%	65%	71%	64%	69%
Number of adults and children who are still alive and on ART at 12 months after initiating treatment	21,404	8,140	13,264	1,448	19,956
Total number of adults and children who initiated ART during the twelve months prior to the beginning of the reporting period, including those who have died, those who have stopped ART, and those lost to follow-up	31,231	12,453	18,778	2,251	28,970

Data Source: CIDRZ ART Programme Monitoring Report

[48] CIDRZ Routine ART Programmeme Information Monitoring Report, 2009

Trends in the ART survival rate among adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy and were still alive between 2006 and 2009 show that for 2006 and 2007, survival rate was above 85 per cent but with a generally downward trend for almost all sex and age categories. The exception was the adult population which showed an upward trend between 2006 (91.4 per cent) and 2007 (92 per cent). The downward trend for survival rate were even more evident between 2007 and 2008 dropping from 88.7 per cent to 71.2 per cent respectively and by 2009 the survival rate 12 months after being initiated on ART had dropped to 69 per cent. See Figure 3-13 below

Figure 3.13: Trends in ART Survival 12 Months after Being Initiated on Treatment for 2006-2009



Source: CIDRZ ART Programme Monitoring Report

Although the above trends may not be generalised to the general population, it presents an urgent need for the country to collect data from the facilities and conduct a more robust national survey to monitor the generalised ART survival rate that will inform stakeholders on appropriate interventions to be employed. There is also need to establish what is causing the drop in survival rates if similar trends are generalised to the entire population.

3.5.4 Reduction in Mother-to-child Transmission - Percentage of infants born to HIV-infected mothers who are infected

In high-income countries, strategies such as antiretroviral therapy during pregnancy and following birth and the use of breastfeeding substitutes have greatly reduced the rate of mother-to-child HIV transmission. In low-income countries, significant difficulties exist in implementing these strategies due to constraints in accessing, affording and using voluntary counselling and testing services, reproductive health, and maternal and child health services, which have integrated prevention of mother-to-child transmission interventions, including

breast milk substitute (where this is part of the country's policy on prevention of mother-to-child transmission). Nevertheless, substantial reductions in mother-to-child transmission can be achieved through approaches such as short-course antiretroviral prophylaxis. This indicator sets to assess progress towards eliminating mother-to-child HIV transmission.

According to the impact of ART and PMTCT services in Zambia study (Nzala, Siziya, 2010)[49], Zambia at the time of the survey had four PCR laboratories situated in Arthur Davison Children's hospital, Kalingalinga and UTH in Lusaka providing early infant diagnosis. Between January 2008 and November 2009, a total of 2,220 children admitted to hospitals were tested out of which 872 (39.3 per cent) were positive. These were exposed infants where with SDN 563 infections would have been averted and between 800 and 830 if they were on highly efficacious regimens. When the proportion of infections averted was classified by age group and mothers' prophylactic regimen, most infections that were averted were among children whose mothers were on HAART (Table 3-29 below).

Table 3-29 Percentage of infants infected, infections averted and mother chemo-prophylactic regimen

Age group	Mother's prophylactic regimen	Number of children	Number infected	Infections averted (%)	Infants infected (%)
0 – 6 weeks	AZT +NVP	469	32	93.2	6.8
	HAART	441	22	95.0	5
	NVP	473	40	91.5	8.5
	No intervention	133	26	80.5	19.5
7 weeks to 6 months	AZT +NVP	1,229	138	88.8	11.2
	HAART	1,442	73	94.9	5.1
	NVP	1,320	201	84.8	15.2
	No intervention	757	247	67.4	32.6
7 months to 12 months	AZT +NVP	299	53	82.3	17.7
	HAART	582	81	86.1	13.9
	NVP	470	99	78.9	21.1
	No intervention	611	230	62.4	37.6

Source: ZPCT II

The Ministry of Health data shows that the most commonly used PMTCT regimen in 2009 in line with the national guidelines was prophylactic regimens, using a combination of three ARVs with an estimated distribution of 57 per cent Dual Therapy (3TC, NVP and AZT). This being the case and with reference to Table 3.22 above, for the age group 0-6 weeks, for every 469 HIV positive pregnant women 32 (6.8%) infants are infected. It is estimated that there were 109,984 HIV pregnant mothers in 2009 and therefore extrapolating from the assumptions made above, 7,504 were infants infected. This is further illustrated in Table 3-30 below.

[49] In March 2010, the National HIV/AIDS/STI/TB Council in collaboration with the Department of Community Medicine of the University of Zambia School Of Medicine facilitated a study on the impact of ART and PMTCT Services in Zambia using treatment survival rates and new infections averted from mother to child.

Table 3-30 Percentage of infants born to HIV-infected mothers who are infected

	0-6 Weeks
Percentage of infants born to HIV-infected mothers who are infected	6.8%
Estimated number of new infant infections	7,504
Estimated number of HIV positive pregnant women	109,984

Chapter 4 BEST PRACTICES

In the past decade, there has been an increased demand for the inter-sharing of 'Best Practices' in HIV and AIDS programming around the key response areas of prevention, care, support, treatment and impact mitigation, across Southern Africa. Extensive efforts have been made by governments, civil society and private sector to roll-out programmes at regional, national and community levels, and many have generated vital lessons learnt and evidence of success in their implementation. However, detailed documentation of such initiatives, outlining core measures of good programming which include, effectiveness, cost-effectiveness, relevance, ethical soundness, replicabililty, innovativeness and Sustainability remains limited in the region.

While recognition of the need to document Best Practices is widely apparent, capacity to identify, plan, conduct, document and disseminate an HIV and AIDS related Best Practice initiative remains limited.

The scale-up of Best Practice documentation in Southern Africa, would serve as a critical springboard for diverse implementing bodies to replicate interventions that have proven effective elsewhere. The documentation and sharing of Best Practices has globally been shown to stimulate and improve programme design and delivery, that is based on lessons learnt, is sustainable, and reaches a larger pool of beneficiaries, using the minimal available resources.

Scaling-up Documentation of HIV & AIDS Best Practices: The Commitments

To help drive the knowledge-sharing process that lies at the heart of documenting and sharing Best HIV and AIDS Practices, in 1997, UNAIDS began the production of its 'Best Practice Collection', a series of publications ranging from guidelines, updates and policy papers, to case studies, handbooks and examinations of particular challenges and responses, all designed to promote learning, share experience and empower people and partners engaged in the AIDS response.

The African Union's (AU) HIV and AIDS Continental Strategic Plan positions the AU as an advocate and co-ordinator of a continental response to the emergency posed by HIV and AIDS, and aims to achieve this positioning through six major objectives.

The member states of the Southern African Development Community (SADC) have been responding to the HIV epidemic for more than two decades. Yet, the combined experiences of the member states have not been fully harvested or systematically documented to guide member states and the region at large, in the design and implemention of HIV and AIDS interventions. One of the most useful avenues to strengthen the response is through sharing Best Practices on HIV and AIDS among member states.

4.1 Integrated Mobile VCT and Other Health Services Itezhi-Tezhi District

The Itezhi-Tezhi Integrated Mobile VCT and Other Health Services is a UN Good Practices and Innovations in Public Governance Award. The project objective is to provide an integrated health care system in order to increase community access to basic health services. The project has a project life of three years from October 2007 to October 2010 and a budget of K1,714,475,071.00.

Project Activity Focus

(i) The main issue/problem to be addressed by the project initiative was the bridging of the gap by improving accessibility and utilisation of basic health services by the community.
(ii) Itezhi-Tezhi is a remote, predominantly rural district with a head-count population of 97,000 surrounded by Kafue National Park.
(iii) Though the population has been steadily growing, the health infrastructure has remained the same with only one district hospital and eleven rural clinics.
(iv) The district is characterised by poor road and communication network and seasonal flooding from December to April.
(v) Human resource constraint with most centres being understaffed and run by non-medical staff.
(vi) All health indicators were far below the national targets.
(vii) Access to antiretroviral clinic was limited as services were only available at the district hospital.
(viii) Lack of safe water and sanitation was also a major problem with high incidence of diseases.

Project Outcome

(i) Increase in number of Mother Support Groups has contributed to considerable drops in malnutrition prevalence, underweight case fatality rate and under-5 hospital attendance levels.
(ii) Inaccessible areas could be reached by ambulance, boat or mobile laboratory units.
(iii) Mobile VCT has resulted in more people testing and starting treatment.
(iv) Regular water testing was made possible with use of motorbike testers.
(v) Epidemic preparedness meetings held monthly have contributed to increased awareness on several health issues.
(vi) Increased immunisation coverage also ensured through the use of (motor) bikes.

Chapter 5 MAJOR CHALLENGES 2008/2009 REPORTING PERIOD

With regard the Impact of ART and PMTCT services in Zambia, NAC 2010 highlighted a number of bottlenecks and barriers to accessing ART and PMTCT services. Among the major ones during the current reporting period were:

Infrastructure

The increase in service demand has not matched the infrastructural development in facilities offering ART. There is inadequate space for storage of patient files, for counselling and indeed for dispensing drugs for ARVs. In some places new services have been added but not a single thing was done to create space for the new services. It is difficult to talk about confidentiality in some facilities due to lack of space and congestion. Patient files are sometimes kept in two or three different places due to lack of space.

Most services are still concentrated in easy to reach urban areas or within proximity to district hospitals. Other than physical accessibility, communication between the district level and peripheral health facilities is difficult and sometimes non-existent.

The mobile clinics are not functional in some locations. Community based organisations and most non-governmental organisations (NGOs) working with HIV and AIDS are concentrated within the urban areas that are already well catered for by the district health services. Some of these NGOs offer counselling and then refer patients to the district health facilities for testing. At the health facilities, these referrals are counselled before being tested. The NGOs submit reports at the end of the reporting period and so do the health facilities, which means that there are possibilities of double reporting in terms of numbers counselled.

Problems of human resource and linkages between the PMTCT screening centre and ARV clinic are a big concern.

The Churches Health Association of Zambia (CHAZ) runs a number of hospices around the country that provide care and support to a large number of patients including the vulnerable. Government, however, does not support these facilities financially and most often run into logistical problems.

There are very good protocols and structures for patient follow-up and the people concerned know what is expected of them, but in practice it is not done. One of the major challenges was lack of transport, such as bicycles for the adherence support workers to enable them to reach those places that are far. In addition to that, there was an expectation for the provision of some money to enable adherence support workers to purchase drinks as they travelled long distances, in some cases, to reach the defaulters. As a result, little was known as to what had happened to those that did not show up, whether they were dead or not. This was particularly the case with rural places like Mongu. The scenario was better in urban settings where health workers knew what happened to some of their patients although loss of follow-up was still a problem.

PMTCT

In terms of quality of service, the PMTCT programme has endeavoured to equip the staff providing the service with adequate knowledge. The shortage of adequate numbers of staff still puts a lot of stress on the few so that in the end, quality is still compromised. The programme is mostly externally funded and at times when the funds delay or do not come, delivery of service is affected.

PMTCT has largely been facility based so far. Attempts to involve the community are yet to show positive results as they have only started at a small scale. Coverage is so far reportedly high in terms of identifying pregnant women requiring the service and is estimated at about 61 per cent of all pregnant positive mothers. However, only about 50 per cent of these women do access a complete set of PMTCT intervention. Antenatal care is the entry point to PMTCT as such, the programme has an opportunity to take advantage of the high coverage of antenatal care, especially the first visit. Progressive loss of contact with those that access the service first time is still a major challenge culminating in very low facility deliveries.

Bottlenecks, however, remain in the provision of PMTCT. Some that have been cited include low access as already alluded to despite the wide availability of the service in terms of logistics. There still remain accessibility problems in the rural parts of the country due to distance to health facilities and poor road infrastructure. Counselling rooms are generally inadequate, which compromises confidentiality. Furthermore, not all referred HIV reactive mothers reach ART clinics for further examinations.

Couple Counselling

Most maternal and child health (MCH) facilities have continued to be avoided by the male folk, which makes decision– making for female partners difficult as they are usually counselled without their male counterparts. The partner PMTCT coverage for instance in Mongu was reported at 4 per cent in 2008. There is need to improve on couple counselling and outreach activities through mobile services.

Early Infant Diagnosis

There is still limited access to infant diagnostic techniques, while the turnaround time, especially for peripheral facilities, remains too long for those accessing such services, thereby defeating the much desired early infant diagnosis. It was observed that the problem was being tackled by the introduction of courier systems for the transportation of dry blood spots (DBS) samples to polymerase chain reaction (PCR) centres. However, the courier pick up points are located at district level, posing challenges for peripheral facilities to transmit specimens and receive results on time. There are also instances of DBS bundles running out of stock in some facilities, especially the remote ones which also do not have reliable communication system to timely report shortages.

The uptake of testing for children shows a downward cascade with very few being tested at later ages e.g. at twelve and eighteen months for some reasons that need to be investigated.

Human Resource Challenges

The human resource crisis that has engulfed the health sector in general has not spared the ART and PMTCT programmes either. Although most institutions have appointed staff to coordinate ART implementation, the staff were from time to time expected to attend to other duties to cover the shortages in other areas. Most staff allocated to ART programmes worked extended hours due to the workload. In the past, they used to be compensated for the extra hours monetarily but the incentives have been phased out for sustainability reasons as these were financed by cooperating partners. There are also no non-monetary incentives for these overworked health providers in place or being planned for.

Most health workers bemoaned inadequate training to effectively manage HIV and AIDS in children.

Infant Feeding

Infant feeding practices do not seem to be well articulated by most health providers, resulting in what one would call sub-optimal feeding practices. It seems there is just too much that the few health workers need to know and as such, they tend to choose the easier options available, thereby denying mothers an array of choices from which to make decisions about infant feeding.

Adult Art Assessment

The expansion of ART services have progressed well and no complaints relating to antiretroviral drug (ARV) shortages were reported. The complaint was in the supply of drugs for opportunistic infections which were reportedly out of stock at the time of the survey. Checks in the pharmacies showed that the same drugs were present except that they were supplied for routine patient care and not for ART patients. Pharmacy personnel reported of being told off by central level staff for using these drugs such as co-trimoxazole for prophylaxis in HIV patients. This was the same for all other drugs. There is therefore, some separation between HIV patient care and the general care for patients.

Chapter 6 SUPPORT FROM THE COUNTRY'S DEVELOPMENT PARTNERS

The national response to HIV and AIDS in Zambia has continues receiving support from CPs to address many elements of the HIV and AIDS response. The support comes in various ways:

(i) Secondment of staff to NAC;
(ii) Strengthening of resource management system;
(iii) Payment of the salaries of DACA and PACA for the last four years;
(iv) Provision of transport vehicles for all provinces and districts;
(v) Equipping of the offices of the sub-national coordination structures;
(vi) Leadership training for ownership of the national response; and
(vii) Mainstreaming and decentralisation of the national AIDS response to all sectors. The National AIDS Council Secretariat has filled its institutional capacity and staff requirement by 88 per cent over the last two and half years.

All mechanisms for coordination have been established but not fully functional especially at the sub-national level. Significant advisory support has been provided aimed at enabling the staff at NAC to acquire skills and experience in strategic planning, which they can utilise as they go forward into the next planning cycle.

Cooperating partners must work towards strengthening national HIV and AIDS systems and other associated structures and not taking over the management of national systems which renders the issues of sustainability questionable. This was observed in 2008 in some provinces such as Northern, Lusaka etc. were the management of some national M&E data systems had been taken over by some cooperating partners, who even requested for clearance of their umbrella agencies once MoH and NAC required the data.

To strengthen the national HIV and AIDS M&E System, there is still need for a data reconciliation process at all levels between NAC, MoH and cooperating partners to ensure the same statistics are reported across the board.

For the purpose of strengthening the national response, stakeholders, especially the funders should encourage or even instruct their beneficiaries to work closely with PATF and DATF including data submission. The harnessing of the multi-sectoral approach to achieve greater heights had been proven in a number of district were the DATF receives a lot of support from district stakeholders that it is workable and DATF operations are not affected even when NAC delayed to send funds for operations.

Further, there is need for stakeholders especially the funding agents to direct the beneficiaries to report all their HIV and AIDS activities to DATF. The tendency by some key stakeholders to by-pass PATF/DATF structures when they implement interventions at sub-national levels must be discouraged by the funders

There is also need for capacity building for PACAs and DACAs in data quality techniques, data analysis, data use and data presentation skills.

Chapter 7 MONITORING AND EVALUATION ENVIRONMENT

The National AIDS Response is based on the 'three ones' principles, i.e. one agreed action framework, one national coordinating authority and one agreed upon country level monitoring and evaluation (M&E) system. The National AIDS Council M&E system has well formulated guidelines, functioning structures especially at the central level, human resources, funding, reference materials and a dedicated technical working group. It is guided by a unified costed plan with a budget and national database called National AIDS Council Management and Information System (NACMIS), Ministry of Health Management and Information System (HMIS) and Ministry of Education Management and Information System (EMIS). The national response is being monitored using a NACMIS and HMIS. Information about the effectiveness of the response is collected in the data rich regular surveys carried out by the various institutions including the Central Statistical Office, other line ministries and US Government supported non-governmental organisations. These enhance data quality and add rich data for an evidence-based response.

The implementation period for the current national M&E plan is coming to an end in 2010. This is, therefore, a critical time to reflect on lessons learned and best practices as we improve the monitoring of the response.

Institutional arrangements do not adequately enable the NAC to enforce M&E among partners. Instructional positioning of NAC undermines the authority of NAC.

The following three strategic objectives are the focus of the NAC M&E strategy:

Theme V Objectives

Objective 8.1: Strengthen mechanisms and systems for M&E of the multi-sectoral response

Activities:

(a) Institutionalise the HIV and AIDS M&E system to draw data from all sectors and at all levels on a routine and consistent basis.
(b) Strengthen the system of data collection, management, and flow of information.
(c) Align with the Joint Annual Programme Review (JAPR) and planning and budgeting cycles so that continuous programme redesign and improvement become standard operating procedure.
(d) Improve national biological, behavioural, and social surveillance of HIV/AIDS/STI/TB.
(e) Support essential prevalence, incidence, and evaluation research to complement national surveillance.
(f) Ensure national financial management monitoring is integrated with programme monitoring for all HIV and AIDS programmes.
(g) Complete and operationalise the operations manual.

Objective 8.2: Improve capacity of Implementing Partners for M&E of the situation and the national response

Activity:

- Strengthen capacity to ensure that all stakeholders are able to provide the necessary information for the national M&E system.

Objective 8.3: Strengthen operational and behavioural research and access to information on best practice and cost effective interventions

Activities:

(i) Develop a national HIV/AIDS research strategy that will contain a clear research agenda.
(ii) Establish links with research institutions that will promote cooperation between research agencies to maximise utilisation of research findings.
(iii) Implement appropriate ethical review prior to research being undertaken.
(iv) Encourage, support, and strengthen research related to HIV and AIDS/STI/TB by both local and international researchers.
(v) Support identified priority health research and application of research findings.
(vi) Promote research in traditional/alternative remedies.
(vii) Provide appropriate infrastructure and funding for HIV and AIDS/STI/TB research programmes.
(viii) Encourage collaboration and coordination between and among local and international health researchers.
(ix) Ensure Zambia's participation in vaccine development in partnership with international health research institutions.
(x) Invest in appropriate infrastructure and human resources that are requisite for vaccine development and clinical trials.
(xi) Negotiate for preferential access to outcomes of vaccine research.
(xii) Organise HIV/AIDS research dissemination seminars where all new biomedical and social research relating to HIV/AIDS will be disseminated.

Achievements in 2008 and 2009

(i) The NAC Information System (NACMIS) design was completed and rolled out to all provinces of the country.
(ii) Training of M&E cadres at the University of Zambia centre of excellence for M&E has continued.
(iii) In collaboration with the National Association for State and Territorial Directors (NASTAD), training was started at the community level to strengthen capacity for data collection, management and analysis.
(iv) Recruitment of M&E officer and statistician has greatly enhanced the capacity of the M&E directorate at the NAC secretariat.
(v) Funding was sourced for the recruitment of M&E/IT officers who will be based at provincial level.

Challenges

(i) Monitoring and Evaluation theme group has not functioned optimally.
(ii) Joint-Annual review was not conducted.
(iii) Although there is a strong mandate and structure for M & E at central level, there is a need for continued decentralisation of processes to the sub-national levels (provincial, district and community) where the M&E structure is still weak.
(iv) Improvement of data in quality.
(v) Harmonisation of M&E systems between the NAC and the MoH requires improvement.

(i) Movement of key staff out of the M&E directorate at the NAC secretariat to other positions and due to closing out of supporting mechanisms i.e. STARZ programme.

(ii) District AIDS Coordinating Advisors (DACAs) positions are not yet institutionalised in the NAC structure. They are still volunteers recruited under the UN volunteer service with a limited term of office. This has affected continuity of trained human resources, who usually opt for more stable employment arrangements.

Remedial Actions Planned

(i) Recruitment of provincial and district M&E officers in 2010 will greatly enhance the functional capacity of the provincial M&E structures.

(ii) Review of the M&E theme group structure.

(iii) The continued roll-out of SmartCare should provide an opportunity for the inclusion of NAC NARF reports so that clinical data can be printed straight from the HMIS SmartCare programme.

(iv) Increase data analysis of NARF data to improve data quality.

ANNEXES

Annex 1. Consultation/Preparation Process for the Country Report on Monitoring the Progress towards the Implementation of the Declaration of Commitments on HIV and AIDS

Country: *Zambia*

Date of Data Entry: 29-03-2010

	a) NAC or equivalent	✓ Yes	No
	b) NAP	✓ Yes	No
	c) Others	✓ Yes	No
	(please specify): ➢ *Central Statistics Office*		
2)	With inputs from:		
	Ministries:		
	Education	✓ Yes	No
	Ministry of Health	✓ Yes	No
	Labour	✓ Yes	No
	Foreign Affairs	✓ Yes	No
	Others:	✓ Yes	No
	(specify) ➢ *Community Development and Social Services*		
	➢ *Sport, Youth and Child Development*		
	➢ *Finance and National Development*		
	➢ *Defence*		
	➢ *Transport and Communication*		
	➢ *Agriculture and Cooperatives*		
	Civil Society Organisations	✓ Yes	No
	People Living with HIV	✓ Yes	No
	Private Sector	✓ Yes	No
	United Nations Organisations	✓ Yes	No
	Bilateral Organisations	✓ Yes	No
	International Organisations	✓ Yes	No
	Others:		
3)	Was the report discussed in a large forum	✓ Yes	No
4)	Are the survey results stored centrally	✓ Yes	No
5)	Are data available for public consultation	✓ Yes	No
6)	Who is the person responsible for submission of the report and the follow-up if there are questions on the Country Response Report?		
	Name/ title:	*Dr. Ben Chirwa, Director General*	
	Address:	*National HIV and AIDS/STI/TB Council P.O. Box 38718, LUSAKA, Zambia*	
	E-mail:	*bchirwa@nacsec.org.zm*	
	Telephone:	*+260 211 255044*	

Annex 2. Organisations and Names of Representatives Interviewed for NCPI

PART A: Strategic Plan (AI); Political Support (AII), Prevention (AIII), Treatment, Care and Support (AIV), Monitoring and Evaluation (AV)			
Organisation	Person Interviewed	Title	Section
1. Central Statistics Office	Mr Mayaka	Chair, M&E Theme Group	AV
2. Gender Division	Ms R. Mutema	Specialist – Social, Legal & Governance	AIII, AIV
3. Ministry of Agriculture	Mr A. Simwanza	Principal Agric. Officer	AIII, AIV
4. Ministry of Agriculture	Mr D. Kunda	Senior Sociologist	AV
5. Ministry of Communication & Transport	Ms A. Gondwe	Senior Human Resources Development Officer	AIII, AIV
6. Ministry of Community Development	Not Stated	Human Resource Manager	AIII, AIV
7. Ministry of Defence	Mr R. Mulenga	M&E Manager	AIII, AIV, AV
8. Ministry of Education	Mr P. Chileshe	HIV and AIDS Mobilisation Coordinator	AIII, AIV, AV
9. Ministry of Finance	Mrs Chirwa	HIV Focal Point Officer	AIII, AIV, AV
10. Ministry of Foreign Affairs	Not Stated	Human Resources Development Officer	AIII, AIV
11. Ministry of Health	Mr G. Sikazwe	Health Promotion Specialist	AIII
12. Ministry of Health	Mr Kaliki	Acting M&E Deputy Director	AV
13. Ministry of Home Affairs	Mr G. Gezepi	FPP	AIII, AV
14. Ministry of Justice	Mrs Mwamba	Human Resource Manager	AIII, AIV
15. Ministry of Labour	Not Stated	Deputy Director, HRD	AIII, AIV, AV
16. Ministry of Tourism	Mr. E. Chewe	AG Director	AII,
17. Ministry of Works and Supply	Mr M. Tembo	Machine Supervisor	AIII, AIV, AV
18. Ministry of Youth and Sport	Mr H. Bhuka	Assistant Director, HRD	AIII, AIV, AV
19. National AIDS Council	Dr B. Chirwa	Director General	AI, AII
20. National AIDS Council	Mr O. Mulenga	M&E Director	AV
21. National AIDS Council	Eastern	Provincial AIDS Coordinating Advisors	AI, AII
22. National AIDS Council	Central	Provincial AIDS Coordinating Advisors	AI, AII

23. National AIDS Council	Copperbelt	Provincial AIDS Coordinating Advisors	AI, AII
24. National AIDS Council	Lusaka	Provincial AIDS Coordinating Advisors	AI, AII
25. National AIDS Council	Luapula	Provincial AIDS Coordinating Advisors	AI, AII
26. National AIDS Council	Northern	Provincial AIDS Coordinating Advisors	AI, AII
27. National AIDS Council	North-western	Provincial AIDS Coordinating Advisors	AI, AII
28. National AIDS Council	Southern	Provincial AIDS Coordinating Advisors	AI, AII
29. National AIDS Council	Western	Provincial AIDS Coordinating Advisors	AI, AII
30. National AIDS Council	Mr Phiri	DACA, Kafue and Lusaka	AI, AII
31. National AIDS Council	Not Stated	DACA, Lusaka	AI, AII
32. UNZA-Community Medicine	Professor Baboo	Chair, Prevention Theme Group	AIII

PART B: Human Rights (BI), Civil Society Participation (BII), Prevention (BIII), Treatment Care and Support (BIV)

Organisation	Person Interviewed	Position	Section
1. AIDS Alliance Zambia	Mr Haloba	M&E Specialist	BIII, BIV
	Mrs Mutemwa	ART Community Specialist	
2. CIDRZ	Mrs Matafwali	Research coordinator	BIII, BIV
3. CARE International	Ms M. Simasiku	HIV and AIDS Director	BII, BIII
4. UNAIDS	1. Mr K. Musonda	Programmes officer	BII, BIII
5.	2. Ms J. Chizemba	Programme officer	
6. WHO	Dr Sunkutu	HIV Advisor	BIII
7. World Vision	Mr Sepiso	Prevention Specialist	BIII
8. CSPR	Mr W. Chilufya	Civic Engagement Officer	BI, BII
9. ZPCT II	Dr Shumba	Snr Clinical Care officer	BIII, BIV
10. TALC	Ms V. Sakanga	M&E Specialist	BIII, BIV
11. ZINGO	Mr B. Nyeleti	BCC Specialist	BIII, BIV
12. Youth Vision Zambia	Mr C. Katuta	Policy & Health Advisor	BII
13. SFH	Ms M. Mukamba	Programmes Manager	BIII
14. NZP+	Mr C. Makumbwa	Advocacy Programme Officer	BI, BII, BIII, BIV
15. ZNAN	Mr E. Chani	M&E Specialist	BII
16. CARITAS Zambia	Mr G. Ngulube	Programme Officer	BI, BII

17. AFYA MZURI	Ms Nkonge	Information Coordinator	BIII
18. USG-PEPFAR	Mr I. Milimo	M&E Advisor	BI,BII, BIII, BIV
19. Zambia Civic Education Association	Not Stated	Programmes Manager	BI
20. Tasintha Programme	Ms S. Phiri	Programmes Officer	BI, BII
21. Human Rights Commission	Ms C. Nkhata	HIV and AIDS /HR Officer	BI
22. Ministry of Justice	Ms Z. Mwaba	HIV Focal Point officer	BI
23. Zambia Police	1. Dr Malama	Medical Director	BI, BII
	2. Mr Makasa	National VCT Officer	
24. ZARAN	Ms M. Mwondela	Executive Director	BI,BII, BIII, BIV

Annex 3. List of contributors to the Report Production

Consulting Team	
Kaimfa P. Chandang'oma	Lead Consultant
Peter Chabwera	National Composite Policy Index Consultant
Richard Banda	Data disaggregation Consultant
Technical Advisors	
Dr Amaya Gillepsie	UNAIDS Country Representative
Dr Ben Chirwa	Director General - NAC
Dr Sansan Myint	HIV Specialist, UNICEF
Dr Michael Gboun	UNAIDS M&E Advisor
Kevin Chelemu	Monitoring and Evaluation Officer
Osward Mulenga	Director Research, Monitoring & Evaluation

STEERING COMMITTEE			
1.	Beyant Kabwe	TBA	M & E Advisor
2.	Chola Chabala	Ministry of Finance	M&E Specialist
3.	Douglas Hampande	National AIDS Council	IEC Specialist
4.	Dr. Mukumbuta Nawa	Churches Health Association of Zambia	M & E Advisor
5.	Dr Paul Kalinda	European Union	Health Advisor
6.	Enock Banda	JHPIEGO	M&E Advisor
7.	Flavia Mwape	COH III	M&E Officer
8.	Harold Witola	National AIDS Council	Research Specialist
9.	Ian Membe	Centre for Disease Control	M & E Associate Advisor
10.	Kevin Chilemu	National AIDS Council	M & E Officer
11.	Linda Zulu Mwaba	MoH	HR Officer
12.	Lizzy Chanda	ZBCA	Programmes Coordinator
13.	Loyd Mushauko	Zambia Police	M&E Officer
14.	Michael Gboun	Joint United Nations Programme on HIV&AIDS	M & E Advisor
15.	Osward Mulenga	National AIDS Council	Director M & E
16.	Pascalina	Ministry of Health	M & E Specialist
17.	Paul Chitengi	National AIDS Council	M & E Specialist
18.	Penzi Shikabi	SWAAZ	Programmes Officer
19.	Remmy Mulenga	Defence Force Medical Services	M & E Officer
20.	Richard Sikananu	Network of Zambian People Living with HIV (NZP+)	Executive Director
21.	Richard Sikananu	NZP+	Executive Director
22.	Robert Holoba	International HIV/AIDS Alliance of Zambia	M & E Technical Advisor
23.	Scott Tembo	Global Fund for TB, HIV and AIDS and Malaria	Programme Manager
24.	Sylvester Katontoka	MHUNZA	
25.	Yorum Siame	CHAZ	HIV/AIDS Senior

Programmes Officer

Annex 4. ATTENDANCE LIST – UNGASS DATA ANALYSIS RETREAT

Date: 27 –29 January 2010 Venue: Cross Roads Lodge

No.	Name	Designation	Organisation	Telephone	E-mail
1.	Catherine Muyawala	Resource Centre Manager	NAC	255044	cmuyawala@nacsec.org.zm
2.	Charles Nkunta	MIS Specialist	NAC	255044	cnkunta@nacsec.org.zm
3.	Dean Phiri	Global Fund Grants Manager	MoH	0977-668404	deanphiri@yahoo.com
4.	Dorothy Jere	TRC	NAC	255044	djere@nacsec.org.zm
5.	Dr Alex Simwanza	Director Prevention & Multi-sectoral Response	NAC	255044	asimwanza@nacsec.org.zm
6.	Dr B.U. Chirwa	Director General	NAC	255044	bchirwa@nacsec.org.zm
7.	Dr Michael Gboun	M & E Advisor	NAC	255044	mgboun@nacsec.org.zm
8.	Enock Banda	M & E Advisor	JHPIEGO	0977-471538	ebanda@jhpiego.net
9.	Flavia Mwiche	M & E Officer	FHI/COH		richardbanda@gmail.com
10.	Harold Witola	Research Specialist	NAC	255044	hwitola@nacsec.org.zm
11.	Ian S. Membe	M & E Advisor	CDC	0976-068086	membei@zm.cdc.gov
12.	Kaimfa Chandang'oma	Lead Consultant	Petrich Projects	0977-756851	kaimfapc@yahoo.com
13.	Kevin Chilemu	M & E Officer	NAC	255044	kchilemu@nacsec.org.zm
14.	Kunyima Banda	Programme Manger	NZP+		nanzp@zamnet.zm
15.	Peter Chabwera	NCPI Consultant	NAC	0977-746951	p.chabwela@consultant.net
16.	Professor S. Baboo	Chair, Prevention Theme Group	UNZA	0978-774068	sridatt2001@yahoo.com
17.	Richard Banda	Data Disaggregation Consultant	MOH	0955760409	

Annex 5. ATTENDANCE LIST - CONSULTATIVE VALIDATION MEETING ON UNGASS/UA PROGRESS REPORT FOR 2010

Date: 11th March 2010 Venue: Mulungushi International Conference Centre:

No.	NAME	DESIGNATION	ORGANISATION	EMAIL ADDRESS
1.	Amanzi Patrick	M & E Officer	MoH	patwaters2003@yahoo.co.uk
2.	Bushimbwa Tambatamba	NPO/PMTCT	WHO	tambatamba@zm.afro.who
3.	Chama Chanda	TB Specialist	NAC	cchanda@nacsec.org.zm
4.	Chilambe Katuta	Director of Programmemes	Youth Vision	chilambe@gmail.com
5.	Clement Ndongmo	Virologist	CDC	ndongmoc@zm.cdc.gov
6.	Dara Potter	Epidim	CDC	potterd@zm.cdc.gov
7.	Douglas Hampande	IEC Specialist	NAC	dhampande@nacsec.org.zm
8.	Dr Alex Simwanza	DPMR	NAC	asimwanza@nacsec.org.zm
9.	Dr B. Chirwa	NAC	NAC	bchirwa@nacsec.org.zm
10.	Dr Max Bweupe	PMTCT Specialist	MoH	bweupem2007@yahoo.com
11.	Dr Rosemary Kumwenda	UNDP	ARR	Rosemary.kumwenda@undp.org
12.	Edina Kalaluka	Nat. Prog. Officer	UNESCO	e.kalaluka@unesco.org
13.	Elizabeth Choseni	CCM Admin.	NAC	echoseni@nacsec.org.zm
14.	Elizabeth Serlemitsos	Country Rep.	JHU/CCP	eserlemi@gamil.com
15.	Erin Balch	M&E Advisor	USAID	erbalch@usaid.gov
16.	Felix Mwanza	National Coordinator	TALC	Felixtalc@iconnect.zm
17.	Florence Mulenga	HIV and AIDS P.O.	UNFPA	mulenga@unfpa.org
18.	Harold Witola	Research Specialist	NAC	hwitola@nacsec.org.zm
19.	Harvey Ngwale	Programme Officer	ZAMDHARP	harveyngwale@yahoo.com
20.	Ian Membe	M & E Advisor	CDC	membei@zm.cdc.gov
21.	Joseph Kamanga	Prevention Serv. Advisor	Corridors of Hope (CoH)	jkamanga@fhi.org
22.	Joseph Phiri	M & E Data Officer	CHAZ	Joseph.phiri@chaz.org.zm
23.	Josephat Kakoma	Technical Assistant	CHAZ	Josephat.kakoma@chaz.org.zm

No.	NAME	DESIGNATION	ORGANISATION	EMAIL ADDRESS
24.	Kaimfa Chandang'oma	Consultant	PETRICH PROJECT	kaimfapc@gmail.com
25.	Kanyanta Sunkutu	HIV Advisor	WHO	sunkutuk@zm.afro.who.int
26.	Kaonga Wezi	HIV Specialist	MoH	wckaonga@yahoo.com
27.	Kennedy Tembo	OVC Specialist	OVC Malaria	kentembo@yahoo.com
28.	L. Chanda	Prog. Coordinator	ZBCA	Lizzyc.zbca@connect.zm
29.	Lloyd Mushauko	IEC/M&E	ZP	mushloyd@yahoo.co.uk
30.	Malala Mwondela	Executive Director	ZARAN	zaran@zamtel.zm
31.	Malelo Ilukena	HIV/AIDS/TB Prog. Officer	ZNAN	maleloi@yahoo.co.uk
32.	Mercy Ulaya	PMTCT/VCT Specialist	NAC	mulaya@nacsec.org.zm
33.	Monica M. Jalasi	OVC Specialist	NAC	mjalasi@nacsec.org.zm
34.	Muteteka Maxwell	TC&S Specialist	NAC	mmuteteka@nacsec.org.zm
35.	Mwila Kangwa	M & E Advisor	FHI/CoH	mkangwa@fhi.org
36.	Mwilu Mumbi	C S Specialist	NAC	mmumbi@nacsec.org.zm
37.	Nalituba C. Mwale	AD (A)	MoE	nmwale@moe.gov.zm
38.	Nyewani Soko	Statistician	NAC	nsoko@nacsec.org.zm
39.	Nyoni Bedson	Librarian	NAC	bnyoni@nacsec.org.zm
40.	Peter Chabwela	Consultant	-	pchabwela@yahoo.co.uk
41.	Prof. Baboo	Chair, Prevention	NAC	sridutt2001@yahoo
42.	Richard Bandaq	Principal M&E Officer	MoH	richardbanda@gmail.com
43.	Richard Sikanuna	Executive Director	NZP+	richardosik@yahoo.com
44.	Sansan Myint	HIV Specialist	UNICEF	smyint@unicef.org
45.	Selestine Nzala	Researcher	UNZA	selestinenzala@yahoo.com
46.	Stanley Kamocha	Data Analyst	CDC	kamochas@zm.cdc.gov
47.	Susan Zimba-Tembo	NPO/IMAI	WHO	tembos@zm.afro.who.int
48.	Wendy Mary Kateka	Youth Women Affairs Off	ZAMDHARP	mudziwesihle@hotmail.com
49.	Wendy Mudzingwa	WWD Officer	CDF-ZAM	zamdihp@yahoo.com

Annex 6. ATTENDANCE LIST - FINAL VALIDATION MEETING ON UNGSS/UA COUNTRY PROGRESS REPORT

Date: 24th March 2010 Venue: Mulungushi International Conference Centre:

No.	NAME	ORGANISATION	DESIGNATION	EMAIL ADDRESS
1.	Amanzi Patrick	MoH	M & E Officer	patwaters2003@yahoo.com
2.	Amaya Gillespie	UNAIDS	UCC	gillespiea@unaids.org
3.	Charles Nkunta	NAC	MISS	cnkunta@nacsec.org.zm
4.	Chrispine Melele	NAC	PDMRS	cmelele@nacsec.org.zm
5.	Chungu Fred	NZP+	Programmeme Officer	Fred.Chungu@gmail.com
6.	Dorothy N. Jere	NAC	T/RC	djere@nacsec.org.zm
7.	Dr M. Gboun	NAC/UNAIDS	M & E Adv.	mgboun@nacsec.org.zm
8.	Dr Dean Phiri	MoH	MM	deanphiri@yahoo.com
9.	Enock Banda	Jhpiego	M & E Advisor	ebanda@jhpiego.net
10.	Eric Sattin	NAC	Advisor	esattin@nacsec.org.zm
11.	Evans Zulu	NAC	Office Assistant	ezulu@nacsec.org.zm
12.	Felix Mwanza	TALC	Nat. Coordinator	felixtalc@iconnect
13.	Gladys Ngoma	NAC	PSS	gngoma@nacsec.org.zm
14.	Grace Chibowa	NAC	PACA	grace.chibowa.com.zm
15.	Harvey Ngwale	ZAMDHARP	Programmeme Officer	harveyngwale@yahoo.com
16.	Isaac Zulu	CDC	Branch, prevention, Care & treatment	zului@zm.cdc
17.	Kaimfa Chandang'oma	PETRICH Projects	Consultant	kaimfapc@gmail.com
18.	Kanyanta Sunkutu	WHO	HIV Advisor	
19.	Kevin Chilemu	NAC	M & E Officer	kchilemu@nacsec.org.zm
20.	Lastone Chitembo	UNICEF	Programmeme Officer	ichitembo@unicef.org
21.	Lloyd Mushauko	ZP	M & E Officer	mushloyd@yahoo.co.uk
22.	Malelo N. Ilukena	ZNAN	TB Prog. Officer	maleloi@yahoo.com
23.	Mercy Ulaya	NAC	PMTCT/VCT	mulaya@nacsec.org.zm
24.	Nalituba C. Mwale	MoE	MoE HIV/AIDS Coordinator	nmwale@yahoo.uk
25.	Nyewani Soko	NAC	Statistician	nsoko@nacsec.org.zm

26.	O. Mulenga	NAC	Director M &E & Research	omulenga@nacsec.org.zm
27.	Prof. Baboo	UNZA/SOM	Prevention Chairperson	sridutt2001@yahoo.com
28.	Richard Banda	MoH	Principal M & E Officer	richardbanda@gov.co
29.	Rosemary Sishimba	Senior Citizens Association	National Coordinator	scaz@zamtel.zm
30.	Sansan Myint	UNICEF	HIV Specialist	smyint@unicef.org

Annex 7. ZNBT Certificate of Quality Assessment Certificate

Certificate of Participation

This certifies that

Zambia National B.T.S. (Headquarters)

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participated in External Quality Assessment Schemes organised by

National Serology Reference Laboratory, Australia

for the year 2008

HBV Serology
HCV Serology
HIV Serology

Elizabeth M. Dax, AM; M.D.; B.S.; PhD
Director
National Serology Reference Laboratory, Australia
4th Floor, Healy Building, 41 Victoria Parade Fitzroy, VIC, 3065, AUSTRALIA

World Health Organization

The NRL is a W.H.O. Collaborating Centre

THE DIGITALPT INTERNATIONAL EQA COLLABORATION

AccuTest HealthMetrx NRL

Annex 8. **National Policy Index Questionnaire (not attached here on account of size of document)**

Annex 9. **PMTCT Under-five cards sample – Boys (not attached here on account of size of document)**

Annex 10. **PMTCT under-five card sample – girls (not attached here on account of size of document)**