



Republic of Zambia



NATIONAL HIV/AIDS STRATEGIC FRAMEWORK 2014 – 2016

A nation free from the threat of HIV and AIDS



FOREWORD

It is now over thirty years since the HIV and AIDS epidemic emerged in Zambia. This Strategic Plan is the fourth since 2002, when the first plan was developed by the Government of the Republic of Zambia, to systematically respond to the epidemic.

The people of Zambia in collaboration with our partners have developed and implemented diverse programmes to prevent new infections and improve the quality of life of those infected and affected by HIV and AIDS. Over the last two decades, Zambia has scored tremendous achievements in halting and beginning to reverse the effects of the epidemic. Current impact level statistics from the 2007 Zambia Demographic and Health Survey (ZDHS), Modes of Transmission (MOT) study, Health Management Information System (HMIS) and the Joint Mid-Term Review (JMTR) findings show that there is a decrease in the incidence rate in adults (15+ years) from 1.6% (82, 000) in 2009 to 0.8% (46, 000) in 2012. The rate of infection in children (0–14 years old) has also dropped by up to 51% by 2012. In addition, the number of health facilities dispensing ARVs in Zambia has increased from 509 in 2011 to 564 in 2012. Through these facilities, a total of 580, 118 children and adults are receiving antiretroviral therapy out of the 708, 460 people estimated to be in need of ART. This represents 81.9% coverage.

Despite this progress, however, HIV and AIDS still remains a major threat to our nation. Zambia's HIV prevalence, projected at 12.6% in 2013, is among the highest in the world. In 2009, it was estimated that 226 new adult infections and 25 child infections occurred each day. It is against this background that the Zambian Government remains cognisant of the need for a concerted multi-sectoral and decentralised response to the epidemic. In this regard, the National HIV/AIDS/STI/TB Council has continued to spearhead the development of national strategies to guide the national HIV response. This revised National HIV and AIDS Strategic Framework 2014 - 2016 aims at providing comprehensive and quality care and support to all, using evidence and results based programming. The objective of the Revised Strategic Framework is, therefore, to stop both new infections and death due to AIDS in adults and children. This Plan has adopted an investment approach, as opposed to the 'business as usual' attitude. It focuses on high impact interventions and programming that will lead to high impact results.

Government recognises and appreciates the need to take immediate action to implement interventions that work and yield better results. Our duty is to address the drivers of the epidemic that include, among others, multiple and concurrent partnerships, low levels and inconsistent use of condoms, mother to child transmission, low levels of circumcision, gender inequalities, alcohol and substance abuse and high poverty levels. Our legacy for future generations will not be measured by our wealth but by the quality of life that they will inherit – A nation free from the threat of HIV and AIDS.

I, therefore, urge all the people involved in the implementation of this Strategic Framework to fully dedicate themselves to this important national assignment. The Government of Zambia, through NAC, remains committed to supporting you to ensure the successful implementation of the Framework.



A rectangular box containing a handwritten signature in blue ink. The signature appears to read "J. Kasonde".

Hon. Dr. Joseph Kasonde, MP
Minister of Health and
Chairperson of the Cabinet Committee on Health, HIV and AIDS

PREFACE

The Revised National HIV and AIDS Strategic Framework (R-NASF) 2014 - 2016 constitutes a multi-sectoral, multi-layer and decentralised response to HIV and AIDS in Zambia. The Framework is designed to provide adequate space and opportunities for Communities, Civil Society, Private Sector, Development Partners (Bilateral and Multi-lateral Agencies) and Government Institutions to actively participate in the implementation of evidence based HIV and AIDS programmes based on their mandates and comparative advantages.

The R-NASF has been developed through a highly participatory and consultative process and reflects the aspirations of the people of Zambia in their efforts to fight the HIV and AIDS epidemic. The Framework will support decentralised implementation with meaningful involvement of communities, People Living with HIV (PLHIV) and Civil Society Organisations.

I urge all the stakeholders to formulate and implement innovative intervention plans that are aligned to this R-NASF. The National AIDS Council will provide policy and technical guidance throughout the process of implementation. It is my sincere hope that all stakeholders will continue supporting NAC and the entire Government of the Republic of Zambia in the fight against the HIV and AIDS epidemic as we embark on the last mile of ensuring Zero New Infections, Zero Deaths due to AIDS and Zero Stigma and Discrimination.

**Chairperson
National HIV/AIDS/STI/TB Council**

ACKNOWLEDGEMENTS

The National AIDS Council Secretariat wishes to acknowledge, with gratitude, the valuable contribution of several individuals and organisations who contributed to the development of the Revised National HIV and AIDS Strategic Framework 2014 - 2016.

The NAC Secretariat wishes to express special thanks and appreciation to members of all Technical Working Groups (TWG) for their tireless efforts and invaluable contributions that made it possible to ruminate through the innovative strategies contained in this R-NASF document.

Sincere appreciation is extended to Cooperating Partners, Government Ministries and Departments, Civil Society Organisations, PLHIV, Provincial and District AIDS Task Forces and Community Members for their meaningful participation which helped to improve the quality and comprehensiveness of this document. We acknowledge both the technical and financial assistance provided by the UN Joint Team on AIDS in Zambia during the process of development and review of this document.

Finally, I want to express my gratitude to the staff of the National HIV/AIDS/STI/TB Council for their dedication and hard work during the entire process. Without their cooperation and support the R-NASF would not have been possible.



Dr. Jabbin L. Mulwanda
Director General
National HIV/AIDS/STI/TB Council

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LIST OF ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
ARV	Anti-Retroviral Drugs
ART	Anti-Retroviral Treatment
ATC	Advanced Treatment Centre
BSS	Behavioural Surveillance Survey
CATF	Community AIDS Task Force
CBO	Community Based Organisation
CBTA	Cross Border Traders Association
CCP	Comprehensive Condom Programming
CCM	Country Coordinating Mechanism
CDC	United States Centres for Disease Control and Prevention
CD 4	Cluster of Differentiation 4
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CEIT	Central European Institute of Technology
CPs	Cooperating Partners
COH	Corridors of Hope
CRC	Convention on the Rights of the Child
CSE	Comprehensive Sexuality Education
CSO	Civil Society Organisation
CSS	Community System Strengthening
DACA	District AIDS Coordination Advisor
DATF	District AIDS Task Force
DBS	Dried Blood Spot
DFID	Department for International Development
DMO	District Medical Officer
EIA	Environmental Impact Assessment
EID	Early Infant Diagnosis
eMTCT	Elimination of Mother to Child Transmission
FBO	Faith Based Organisation
FSW	Female Sex Work(er)
GARPR	Global AIDS Response Progress Reporting
GBV	Gender Based Violence
GII	Gender Inequality Index
GIPA	Greater Involvement of PLHIV
HII	High Impact Interventions
HIV	Human Immuno-deficiency Syndrome
HLT	High Level Targets
HMIS	Health Management Information System
HTC	HIV Testing and Counselling
HSV-2	Herpes Simplex Virus-2
IEC	Information Education Communication
ILO	International Labour Organisation
IOM	International Organisation of Migration

IPC	Inter-Personal Communication
IPT	Intermittent Preventive therapy
JMTR	Joint Mid-Term Review
KYE	Know your Epidemic
KYR	Know your Response
LDTD	Long Distance Truck Drivers
MARPs	Most at Risk Populations
MC	Male Circumcision
MCDMCH	Ministry of Community Development Mother and Child Health
MCH	Maternal Child Health
MCP	Multiple Concurrent Partnership
MDG	Millennium Development Goal
METTS	Medical Emergency Triage and Treatment System
MESTVEE	Ministry of Education Science Vocational Training and Early Education
MOH	Ministry of Health
MOT	Modes of Transmission
MSM	Men who have Sex with Men
MTCT	Mother to Child Transmission
MTWSC	Ministry of Transport, Works, Supply and Communication
NAC	National HIV/AIDS/STI/TB Council
NACMIS	National HIV/AIDS/STI/TB Council Management Information System
NCPI	National Commitments and Policy Instrument
NDP	National Development Plan
NASF	National AIDS Strategic Framework
NFNSP	National Food and Nutrition Strategic Plan
NGO	Non-Governmental Organisation
NGOCC	Non-Governmental Organisations Coordinating Council
NHC	Neighbourhood Health Committee
NOP	National Operations Plan
NTP	National Tuberculosis Programme
ODA	Official Development Assistance
OVC	Orphan and Vulnerable Children
PATF	Provincial AIDS Task Force
PEP	Post Exposure Prophylaxis
PHC	Primary Health Care
PEPFAR	President's Emergency Plan for AIDS Relief
PITC	Provider Initiated Testing and Counselling
PITMEO	Provincial Information Technology Monitoring and Evaluation Officer
PLHIV	People Living with HIV
PSMD	Public Service Management Division
PSRP	Public Service Reform Programme
RDA	Road Development Agency
RHCC	Reproductive Health Change Communication
R-NASF	Revised National HIV and AIDS Strategic Framework
SADC	Southern African Development Community
SARF	Stakeholder Activity Reporting Form
SBCC	Social and Behaviour Change Communication

SFH	Society for Family Health
SMAGs	Safe Motherhood Action Groups
SNDP	Sixth National Development Plan
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
SW	Sex Workers
TB	Tuberculosis
TDRC	Tropical Diseases Research Centre
TDZ	Truck Drivers of Zambia
THPAZ	Traditional Health Practitioner Association of Zambia
TWG	Technical Working Group
UA	Universal Access
UN	United Nations
UNAIDS	Joint United Nations Programme on AIDS
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government
VMMC	Voluntary Medical Male Circumcision
VSO	Volunteer Service Overseas
WDC	Ward Development Committee
WHO	World Health Organisation
ZDHS	Zambia Demographic and Health Survey
ZEMA	Zambia Environmental Management Agency
ZHDR	Zambia Human Development Report
ZNBTS	Zambia National Blood Transfusion Service

EXECUTIVE SUMMARY

The Revised National HIV and AIDS Strategic Framework (R-NASF) is a three-year framework covering the period 2014 - 2016. It is intended to guide and inform the implementation of the national HIV multi-sectoral response in Zambia. It is aligned to various local and international frameworks, including the Revised Sixth National Development Plan (R-SNDP) 2014 - 2016. The process of revising the NASF has been guided by the UNAIDS 'Investment Approach,' which puts people at the centre of the national response, focusing on evidence-based interventions. The Investment Approach demonstrates that there are high impact interventions which prevent new infections and reduce AIDS related deaths.

The purpose of the framework is to:

- i. Provide an overall strategy for the planning, coordination and implementation of the multi-sectoral national response based on available evidence;
- ii. Articulate national priorities, expected outcomes and targets that all stakeholders should work towards, based on their respective mandates, resources and comparative advantage;
- iii. Articulate an agreed framework for the implementation of the multi-sectoral response developed in partnership with civil society, private sector, public sector and development partner inputs that is in line with the three-ones principle (one strategy, one coordinating body and one M&E system); and
- iv. Provide a transparent framework to form the basis for reaching agreement with development partners on their technical and financial support and the management and coordination of the response.

With no new evidence available, the framework continues to rely on findings from the Zambia Demographic Health Survey (ZDHS) 2007 and the Modes of Transmission (MOT) Study 2009. However, latest programme data from the Health Management Information System (HMIS), Spectrum modelling software and findings of the Joint Mid-Term Review (JMTR) of the NASF 2011-2015 conducted in 2013 are used wherever possible to update the epidemiological analysis and inform programming. As a consequence, the factors impacting the transmission of HIV remain the same as those identified in the NASF 2011-2015. Current impact level statistics from the ZDHS, MOT, HMIS and JMTR findings include (i) A decrease in the incidence rate in adults (15+ years) from 1.6% (82,000) in 2009 to 0.8% (46,000) in 2012. The rate of infection in children (0-14 years old) also dropped by up to 51% by 2012 (ii) An increase from 509 in 2011 to 564 in 2012 in the health facilities dispensing ARVs in Zambia with 580,118 children and adults receiving antiretroviral therapy out of the 708, 460 people estimated to be in need of ART, representing 81.9% coverage.

The R-NASF is driven by a long term vision for the country with respect to the National HIV Response which is "A nation free from the threat of HIV". In line with the Vision statement, the country's mission statement for the National HIV Response is "The national multi-sectoral response, coordinated by NAC, committed to controlling the HIV epidemic by integrating it into the national development agenda and scaling up prioritised actions that are rapid and responsive to the needs of the local community to be served".

Accordingly, the R-NASF will strive towards averting between 170, 000 and 360, 000 new HIV infections and 60, 000 and 123, 000 AIDS related deaths by 2030.

Implementation of the R-NASF will be in line with the provisions of the HIV Policy of 2005 and in accordance with the core values of the National HIV multi-sectoral response.

Zambia has prioritised implementation of High Impact Interventions focusing on reaching key populations as part of its strategy to reduce new infections and improve life expectancy of PLHIV. The country has further expanded the list of key populations as a deliberate attempt to ensure that populations with historical and disproportionate lack of service access are identified and considered for programming.

The R-NASF has prioritised six basic programmes for the Response:

- i. Treatment;
- ii. HIV Testing and Counselling (HTC);
- iii. Elimination of Mother to Child Transmission (eMTCT);
- iv. Voluntary Medical Male Circumcision (VMMC);
- v. Condom Programming; and,
- vi. Social and Behaviour Change.

In order to have a holistic approach to treatment and prevention of the epidemic, the R-NASF pays attention to critical enablers and development synergies. Critical enablers are those activities that have been identified to be essential for the effective and efficient implementation of basic programme activities and whose sole or primary objective is an HIV-specific outcome. Development synergies on the other hand are a presentation of linkages between HIV and some of the most important development sectors, highlighting the causal and effects of HIV on that sector and articulating strategies to reduce the causes and effects of the epidemic on that sector. In other words, these activities do not have an HIV focus as the primary outcome.

A critical cross-cutting theme throughout the Response is the effective mobilisation of resources. The HIV and AIDS response in Zambia is heavily dependent on external aid. However, Government contribution to the health sector from its own resources has increased in recent years from 8.7% in 2010 to 11.3% in 2013. One of the key options for increasing the finances available to the health sector through sustainable means has been identified as the establishment of the Social Health Insurance Scheme. The National Social Health Insurance Scheme shall, among other functions, supplement the normal funding mechanism to the health sector in general and the National HIV response in particular. This will, therefore, increase sustained funding to the sector which is a necessary step towards achieving universal health coverage and provision of access to quality health care. Other options for increasing financing for health include the integration of HIV programming in all capital projects through the Environmental and Social Impact Assessment.

The R-NASF has been costed at a macro level using a Resource Needs Estimate. The total funding requirement for the Response, for the three year period, is estimated at US\$1, 650, 926, 488, with available funding totalling US\$1, 387, 081, 168 and an overall funding gap of US\$ 263, 845, 320.

Monitoring and Evaluating (M&E) of the implementation of the Revised National AIDS Strategic Framework 2014 - 2016 takes into account existing monitoring and evaluation sub-systems being implemented by different stakeholders, as well as planning and monitoring frameworks and policies in Government. Accordingly, the framework describes key M&E questions to be addressed; indicators, baselines and targets, data sources and frequency of reporting.

Generally the Revised National HIV and AIDS Strategic Framework (R-NASF) represents one of the most comprehensive and forward-looking implementation guides for HIV and AIDS interventions in Zambia.

CHAPTER 1: INTRODUCTION

1.1 The Country Context

Zambia is a land linked country covering an area of 752, 612km² with a population of more than 13 million. The country is divided into 10 provinces and 103 districts. Zambia is a fast urbanising country, with nearly 40% of the population living in urban municipalities (CSO, 2013).

After many years of decreasing, life expectancy has risen by 40% since 2008 to 49.8 years in 2012 (ZHDR, 2013) in part due to successes made to control the impact of the HIV epidemic. There are signs of improvements in a number of sectors: the mean years of schooling has increased by 3.4 years to 6.7 years per student between 1980 and 2012; adult literacy is estimated to be 68% (60.4% for women and 81.3% for men) with a combined primary, secondary and tertiary school enrolment ratio of 60.5%; and the health sector has increased performance in most of the key health indicators (ZHDR 2013, NHSP 2011-2015).

In 2011, Zambia was ranked as a lower middle income country on account of impressive economic performance with a GDP per capita of US \$1, 500 over the years. Mining and agriculture remain the mainstays of the Zambian economy, with mining contributing 14% to GDP (CSO, 2013). Agriculture provides work for two-thirds of the labour force but accounts for only 6.7% of Zambia's real GDP. In 2012 Zambia was ranked 164 out of 187 countries with a Human Development Index value of 0.448 (ZHDR, 2013). Despite improvements in overall socio-economic development, these gains are not evenly distributed: 20% of the national income is shared by 70% of the population, while the top 10% of Zambians share more than 50% of the total national income (CSO, 2009). Zambia's Gender Inequality Index (GII) in 2012 stood at 0.623, ranking it 136 out of 148 countries. At the time Parliamentary seats held by women in Zambia accounted for only 11.5%. Only 25.7% of adult women had reached a secondary or higher level of education compared to 44.2% of their male counterparts. In terms of maternal health, for every 100, 000 live births, 440 women died from pregnancy related causes. The adolescent fertility rate stood at 138.5 births per 1, 000 live births. Female participation in the labour market stood at 73.2% compared to 85.6% for men (MDG Progress Report 2013).

Although the proportion of people living in extreme poverty has decreased from 58% in 1991 to 42.3% in 2010, the rate at which poverty reduction measures are being implemented is slow and the country is unlikely to achieve its MDG target of reducing poverty to 29% of the population by 2015 (MDG Progress Report 2013). Extreme poverty in Zambia is concentrated in rural areas and is higher (57.7%) than in urban areas (13.1%).

1.2 The Revised National AIDS Strategic Framework

1.2.1 Purpose of the R-NASF

The Revised National HIV and AIDS Strategic Framework (R-NASF) covers the period 2014 - 2016. It is a framework to guide implementation of the National HIV Multi-sectoral Response in Zambia. The purpose of the framework is to:

- i. Provide an overall strategy for the planning, coordination and implementation for the multi-sectoral national response based on available evidence;

- ii. Articulate national priorities, expected outcomes and targets that all stakeholders should work towards, based on their respective mandates, resources and comparative advantage;
- iii. Articulate an agreed framework for the implementation of the multi-sectoral response developed in partnership with civil society, private sector, public sector and development partner inputs that is in line with the three-ones principles (one strategy, one coordinating body, one M&E system); and
- iv. Provide a transparent framework to form the basis for reaching agreement with development partners on their technical and financial support and the management and coordination of the response.

The revision of the NASF adopted an approach of inclusion and was informed by the findings of the Joint Mid Term Review (JMTR) of the 2011 - 2015 HIV Strategic Framework which provided recommendations on how to strengthen the Zambia HIV response. In October 2013, a workshop was held to analyse the Modes of Transmission (2009) and Goals Model (2013) which was an opportunity for key stakeholders to reflect on existing epidemiological evidence using SPECTRUM. This was complemented by further research studies including HIV and Cities (to identify HIV hot spots) and Studies on Key Populations. National consultations were held in all 10 provinces of the country covering a wide range of stakeholders. Revision of the NASF was further informed by the outcome of the National Civil Society Organisation (CSO) consultation dialogue meeting which was held to deepen analysis of the key drivers of the epidemic and appropriate strategies to improve coverage of HIV related services and support.

At a high level UN political meeting in June 2011, Zambia endorsed the global goal of elimination of MTCT (eMTCT) of HIV, defined as a 90% reduction of new HIV infections among children by 2015 (Republic of Zambia, Ministry of Health, 2011). For Zambia this would entail reducing the risk of MTCT of HIV to less than 5% by the end of the breastfeeding period. The Zambian Government has taken a step further and pledged to keep mothers and fathers alive as well as reducing the number of new HIV infections in both women and men by 50% by 2015.

In 2013, Government undertook a PMTCT policy shift from Option A to option B+ in order to make the implementation of eMTCT much simpler and more effective. All positive pregnant women will receive treatment immediately and for life, regardless of CD4 count, and infants will be provided with ARVs from birth through to six weeks regardless of feeding method. This policy builds on the successes of the current eMTCT programme by making the process of accessing treatment easier to implement. Antiretroviral drugs (ARV's) procurement and supply management will be streamlined while linkages between eMTCT and Antiretroviral Therapy (ART) programmes at community level will be strengthened. In addition to the operational benefits, this new policy provides additional health benefits of lower HIV transmission to infants, improved maternal health and lower transmission to HIV-negative male sexual partners.

1.2.2 Revision Process

In 2013, the National HIV/AIDS/STI/TB Council facilitated the holding of the Joint Mid Term Review (JMTR) of the 2011-2015 National AIDS Strategic Framework which had become due for review on account of having been implemented for a period of three years. The review was mainly aimed at assessing the implementation of the NASF using a forward looking approach that would document achievements, lessons learnt, gaps, obstacles, challenges and opportunities at community, district, provincial and national level with regard to the four pillars, including monitoring and evaluation and financing aspects of the 2011-2015 NASF, and to make recommendations for strengthening and improving Zambia's National HIV Response. The review came at a time of the global economic down turn which had led to budget cuts for a number of developmental programmes, including HIV and AIDS programmes. At the international level other competing priorities had emerged such as climate change. According to the World Bank, Zambia was classified as a lower middle income country. Official Development Assistance (ODA) support had significantly declined from about 40% in the 1990s to 4.5% in 2012. Against such a background most donors were reviewing their continued presence in the country.

In addition, new scientific evidence in the last two years post NASF launch needed to be incorporated into the operational plan for the last two years of the NASF. Furthermore, Zambia was a signatory to the UN High Level Meeting (HLM) targets of June 2011. Therefore, the JMTR provided an opportunity for Zambia to take stock of the response thus far and come up with strategies that would maximize impact of the limited available resources. It highlighted the need to move towards a more holistic 'investment approach' to HIV programming. This means treating resources for the HIV response as investments that would deliver returns, rather than as routine expenses that would always have gaps demanding to be filled. Applying such an approach leads to a significant number of lives saved, many future HIV infections averted and a lot less investment on HIV and AIDS needed in the future. It would also provide a platform for incorporating emerging scientific advances to ensure an evidence informed response aligned to regional and global commitments.

Revision of the national ART guidelines in 2013 to take into account the latest WHO guidelines equally influenced the revision of the NASF. This had the effect of increasing the number of patients needing to be initiated on ART, with consequential effects on capacity and resources.

1.2.3 Alignment with National, Regional and International Policy Frameworks

The Framework is aligned to the country's overall development agenda as expounded through the Vision 2030, which is operationalised by the country's national development plans the current plan being the Revised Sixth National development Plan (RSNDP) 2014 - 2016.

At the international front, the Framework is aligned to the Millennium Development Goals (MDGS), United Nations General Assembly Special Session (UNGASS), Political Declaration on HIV and AIDS Targets and SADC HIV and AIDS Strategic Framework 2010 - 2015, including the COMESA Framework for the Multi-Sectoral Programme on HIV and

AIDS 2012 – 2015.

The following table highlights how the R-NASF is directly linked to and will contribute to the achievement of other strategic frameworks.

Table 1: Alignment of the R-NASF with other Policy Frameworks

Strategy	Goal of Strategy	How the R NASF will contribute to the strategy
Vision 2030	To achieve a “nation free from HIV by 2030”	The overall national impact level results are aligned to the SNDP which operationalises the Vision 2030
Sixth National Development Plan	To generate wealth to improve the quality of life and reduce extreme poverty by 50%.	The overall national impact level results are aligned to the SNDP
Millennium Development Goals	Refer to MDG results Index	All the goals are addressed and specific results identified for R-NASF to be achieved by 2016
UNGASS Declaration	To halt and begin to reverse the spread of the HIV by 2015	Aims to reduce new HIV infections from 53, 000 in 2012 to 38, 662 in 2016
UNAIDS e-MTCT Global Plan	Elimination of MTCT (eMTCT) of HIV, defined as a 90% reduction of new HIV infections among children by 2015	Aims at reducing the risk of MTCT of HIV to less than 5% by the end of the breastfeeding period.
SADC HIV and AIDS Strategic Framework 2010-2015	All Member States demonstrate a 50% reduction in the rate of new infections to half of the 2008 levels and mitigate concomitant impacts by 2015.	Aims to reduce new HIV infections from 53, 000 in 2012 to 38, 662 in 2016.
Framework for The Multi-Sectoral Programme on HIV & AIDS for COMESA 2012 – 2015	To contribute to the reduction of HIV and AIDS incidence and prevalence in the region and mitigate the negative impact of HIV & AIDS.	Aims to reduce new HIV infections from 53, 000 in 2012 to 38, 662 in 2016.
Poverty Reduction Strategy	To alleviate poverty among all people living under the poverty datum line.	Aims to reduce ill health and improve quality of life of PLHIV
Gender Plan of Action	To promote gender empowerment, reduce gender vulnerability	R-NASF has mainstreamed gender and specific outputs include gender-based violence. Strategies have also been developed to promote active male involvement in critical areas including HTC, eMTCT and male circumcision.

The R-NASF’s contribution to these policy frameworks will be complemented by sector specific strategic plans to be implemented by the Public Sector, Civil Society and Private Sector and supported by Cooperating Partners. These include but are not limited to: the HIV and AIDS Strategy for the Public Sector (2011-2015), Zambia Decent Work Country Programme (2007); The Ministry of Health (MOH) Revised Strategic Plan (2014-2016); the Revised National Strategic Plan for TB (2014); and the National Gender Action Plan (2007).

1.2.4 R-NASF Guiding Principles

The development of the R-NASF has largely been informed by the policy guidelines contained in the National HIV and AIDS and STI Policy (2005). Stakeholders commit themselves to adhere to these guiding principles that constitute the core values of the National HIV multi-sectoral response. These include:

- i. **Adoption of a human rights approach:** The design and implementation of specific interventions will respect fundamental human rights and put in place strategies to promote and protect them.
- ii. **Political leadership, commitment and engagement:** During the period of the R-NASF implementation, Zambia will strengthen and consolidate good governance, transparency and accountability around HIV at all levels and in all sectors;
- iii. **Greater Involvement of PLHIV (GIPA):** The contribution of PLHIV in prevention and service uptake has significantly increased the success of the national response. The R-NASF will strengthen and expand the involvement of PLHIV at all levels of the national response;
- iv. **Evidence and Results Based Planning:** To get value for money, the R-NASF will promote the use of evidence and results-based planning among all stakeholders. The M&E system will be strengthened to generate the evidence required for decision making, policy formulation and resource allocation;
- v. **Gender Sensitive:** Given the gender bias of the epidemic, gender dimensions will be addressed in all programme areas and mainstreamed in all aspects of the response;
- vi. **Strategic Partnerships and Alliances:** Zambia has adopted a multi-sectoral, decentralised and participatory approach to the implementation of the national response. Meaningful opportunities will be created for all stakeholders to be part of the response, based on their mandate and comparative advantage.
- vii. **“Three-Ones”:** Zambia will mainstream and consolidate the three-ones concept to strengthen coordination and management of the national multi-sectoral response by having One National Strategic Framework (R-NASF), One National Coordinating Authority (NAC), and One National M&E Framework;
- viii. **Health and Community Systems Strengthening:** The success of the national response is largely dependent on effective and comprehensive health and community systems. A part of the R-NASF operational strategy is to strengthen these systems to ensure adequate and equitable distribution and access to services in line with principles of universal access;
- ix. **Decentralised implementation:** R-NASF implementation will be decentralised to provinces, districts, communities and within sectors. Support will be provided to

implementing partners to develop their individual operational plans that are aligned to the national operational plan. Roles and responsibilities of the various coordinating structures and implementing partners at all levels of the response will be clarified.

- x. **Investing for impact and maximising efficiencies:** Zambia will plan using the investment thinking approach in order to achieve maximum leverage on investments in HIV and AIDS.

1.2.5 Vision and Mission Statement

Vision: The R-NASF is driven by a long term vision for the country with respect to the National HIV Response, which is “A nation free from the threat of HIV.”

Mission Statement: In line with the Vision Statement, the country’s mission statement for the National HIV Response is “The national multi-sectoral response, coordinated by NAC, is committed to controlling the HIV epidemic by integrating it into the national development agenda by scaling up prioritised actions which are rapid and responsive to the needs of the local community to be served”.

1.2.6 R-NASF Objectives and Targets

Objectives

- i. Reduce new HIV infections by 50%;
- ii. Reduce AIDS related mortality by 50%;
- iii. Reduce HIV related stigma and discrimination by 50%; and
- iv. Increase domestic financing of the HIV response to 20%.

Impact Targets

- i. Avert between 170, 000 and 360, 000 new HIV infections by 2030; and
- ii. Avert between 60, 000 and 123, 000 AIDS related deaths by 2030.

Outcome Targets

- i. Reduce the rate of annual new infections from 53, 000 in 2012 to 38, 662 in 2016;
- ii. Reduce the percentage of infants born HIV-positive to less than 5% by 2016; and
- iii. Increase the percentage of PLHIV alive 36 months after initiating antiretroviral therapy from 81% in 2013 to 95% by 2016.

CHAPTER 2: EPIDEMIOLOGICAL & RESPONSE ANALYSIS

2.1 Basis for Epidemiological and Response Analysis

The epidemiological analysis is based on several data sources including:

- The Zambia Demographic and Health Survey (ZDHS), 2007
- Zambia Sexual Behaviour Survey (ZSBS), 2008;
- Antenatal Sentinel Surveillance (ANCSS) 2009/2010;
- Modes of Transmission Study, 2009;
- Epidemiological Review and Impact Assessment for TB in Zambia (2014);
- Routine programme reports from the Health Management Information System (HMIS);
- National TB reporting and recording registry;
- The WHO Global Tuberculosis Report; and
- The latest Spectrum Estimates, Goals Model and findings of the Joint Mid Term Review of the NASF 2011-2015

Zambia commenced its fifth DHS in 2014 and the preliminary findings were expected to be disseminated in late 2014. As of 2014, other ongoing surveys included the first National Tuberculosis Prevalence Survey and Analysis of the 2012 Antenatal Clinic Sentinel Survey. The National TB and HIV epidemiological profile will be updated when the data from these surveys becomes available.

2.1.1 HIV Prevalence and Modes of Transmission

Zambia has one of the highest HIV burdens in Sub-Saharan Africa. According to the 2007 Demographic and Health Survey (DHS), HIV prevalence in Zambia for adults aged 15 – 49 years was estimated at 14.3%. However, HIV prevalence is higher among females (16.1%) compared to males (12.3%). In 2009, data from the 21 Antenatal Sentinel Surveillance sites showed mean site HIV prevalence rate of 16.3% among pregnant women aged 15 – 44 years¹. The 2009 Modes of Transmission (MOT) Study provides insights into the potential sources of new infections and the expected incident cases projected resulting from the transmission modes. Six key drivers of the HIV epidemic were identified as: Multiple and Concurrent Sexual Partnerships (MCP), Low Condom Use, Low Medical Male Circumcision, Mobile and Migrant Labour, Under Served populations and Mother-To-Child Transmission (MTCT) of HIV.

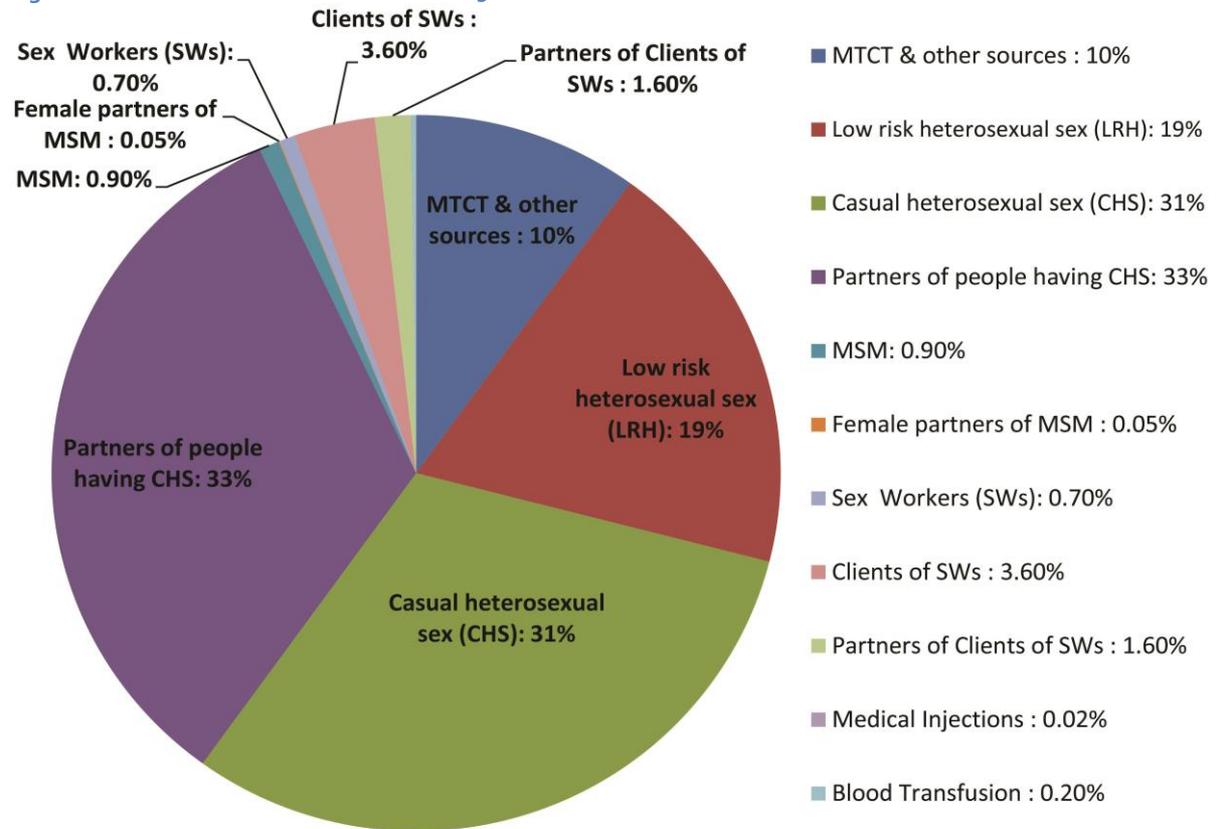
The identified drivers are further compounded by additional drivers of the HIV and AIDS Epidemic in Zambia such as: Lack of Gender Equity, Gender-Based Violence (GBV), Alcohol and Substance Abuse, Poverty and Income Inequalities, Stigma and Discrimination, Cultural Practices increasing infection vulnerability and Human Rights Violations.

The figure below depicts the results of these estimations and indicates that having sex with multiple partners and with partners who are neither spouses nor cohabiting ("casual heterosexual sex) are the main sources of new infections, accounting for 71% of all new

¹Republic of Zambia Ministry of Health, 2010. Zambia Antenatal Clinic Sentinel Surveillance Report, Lusaka

infections. The model also predicts that “low risk” sex between monogamous partners leads to a considerable number of new infections (21% of all new infections in 2008).

Figure 1: Sources of new infections -MOT 2009

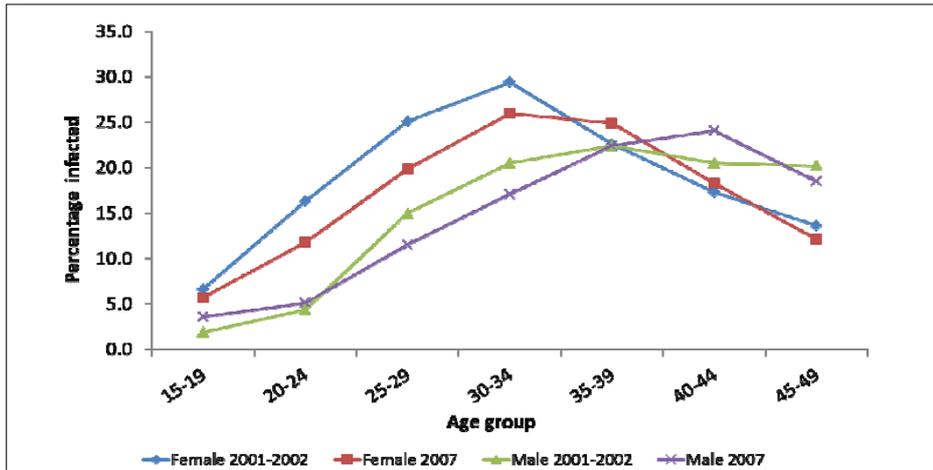


2.1.2 The Age and Sex Distribution of the HIV Epidemic

The epidemiological synthesis of the epidemic using available data shows that HIV prevalence peaks in the 30-34 age groups for females and in the 35-44 age groups for males. The prevalence rate is consistently higher in females compared to males in the younger age groups up to the age group of 30-34. The difference between female and male prevalence rates is very significant in the 15-19 age group at 3.6% prevalence in males versus 5.7% in females; in the 20-24 age group at 5% prevalence in males versus 12% in females; in the 25-29 age group at 12% prevalence in males versus 20% in females; and, in the 30-34 age group at 17% prevalence in males versus 26% in females. However, in the 35-39 year age group, male and female prevalence rates are similar. In the older age groups of 40-44 and 45-49, men have significantly a higher prevalence than women². See the figure below.

²Republic of Zambia Central Statistical Office. 2007. “Zambia Demographic Health Survey”. Lusaka

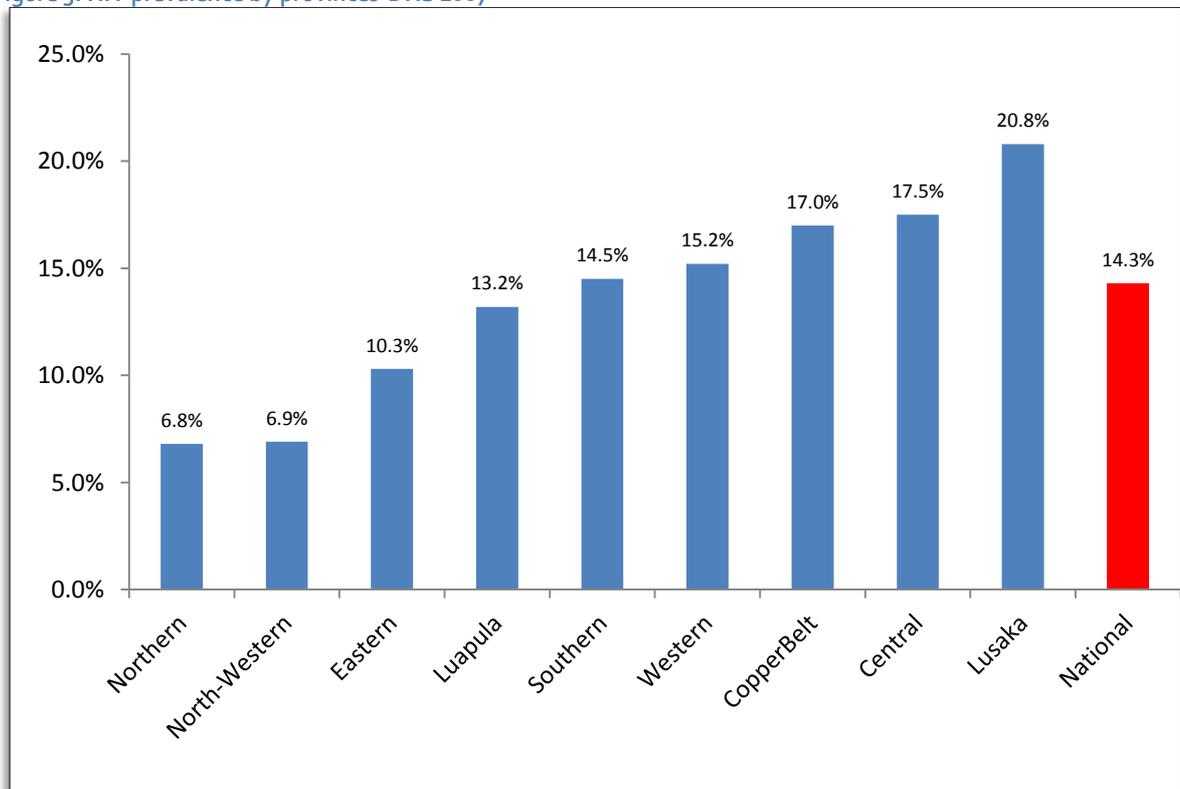
Figure 2: HIV prevalence by age and sex



2.1.3 Geographical Characteristics of the HIV Epidemic:

The 2007 DHS data show that the Zambian HIV epidemic is geographically heterogeneous, with provincial HIV prevalence rates ranging from 7% to 21%. Higher prevalence rates among men and women aged 15-49 years were noted in the provinces of Lusaka, Central, Copperbelt, Western and Southern (20.8%, 17.5%, 17%, 15.2%, and 14.5%, respectively). Northern and North-Western provinces had relatively lower prevalence rates in the same age and gender bands (6.8% and 6.9%, respectively).

Figure 3: HIV prevalence by provinces-DHS 2007

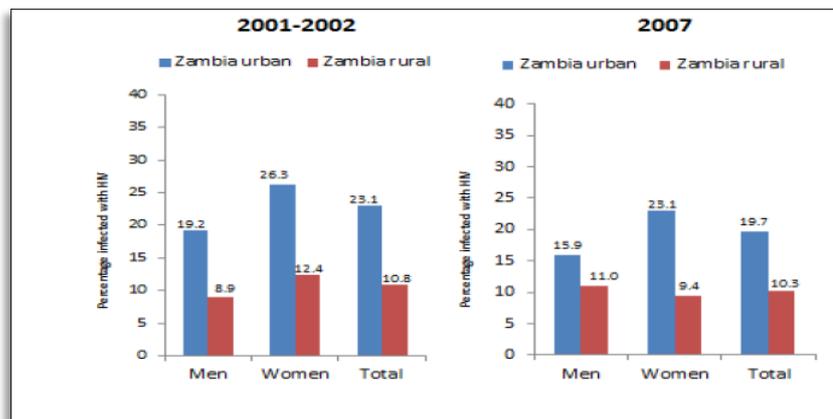


Source: Zambia DHS, 2007

2.1.4 Rural-Urban Heterogeneity:

The 2007 DHS revealed significant differences based on rural–urban classifications. The HIV prevalence rate is consistently higher in urban areas compared to rural areas as shown in the figure below.

Figure 4: HIV prevalence by urban-rural residence



Source: Zambia DHS 2007

2.1.5 HIV Prevalence and Incidence Projections

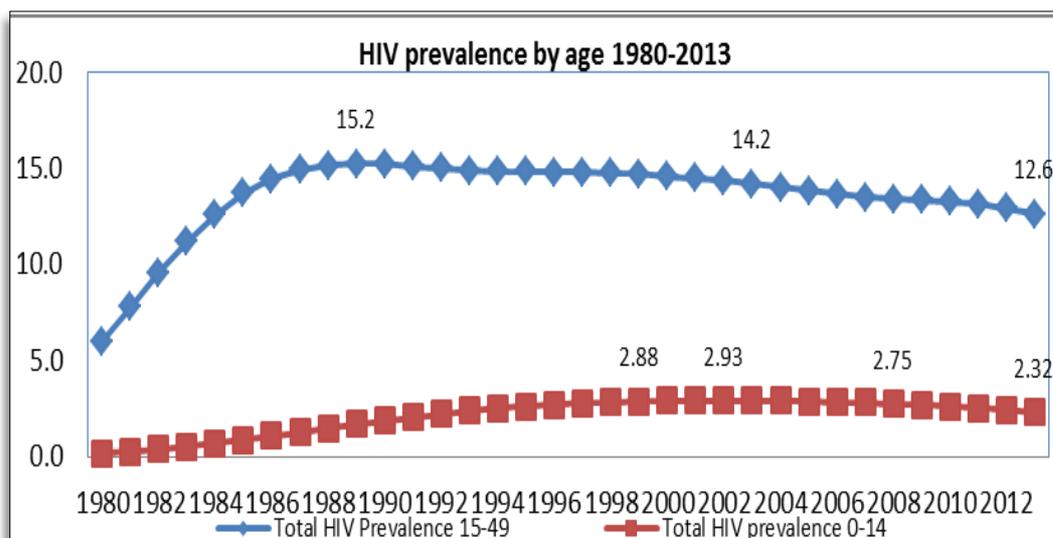
The latest Spectrum estimates of the HIV prevalence rate in adults aged 15-49 years suggest that the Zambian HIV epidemic has been fairly stable over the past 15 years, with a very modest decline after the initial peak prevalence³. According to Spectrum estimates, adult HIV prevalence peaked in the early 1990s at about 15.2% and has slowly declined to just above 12.6% in 2013⁴. Likewise, HIV incidence has declined from 1.81% in 2000 to 0.7% in 2013. For children aged 0-14 years, HIV prevalence reached peak levels in early 2000 and has remained fairly stable over the last ten years with a very modest decline. This inference is drawn from the Spectrum model estimates which indicate that HIV prevalence in children aged 0-14 years declined from 2.9% in early 2000 to around 2.32% in 2013⁵.

³ Zambia National HIV/AIDS/STI/TB Council. 2009. "Zambia HIV Prevention Response and Modes of Transmission Analysis". Lusaka

⁴Spectrum Policy Modelling System, Version 5.03_500 (2014); Zambia Model March 2014

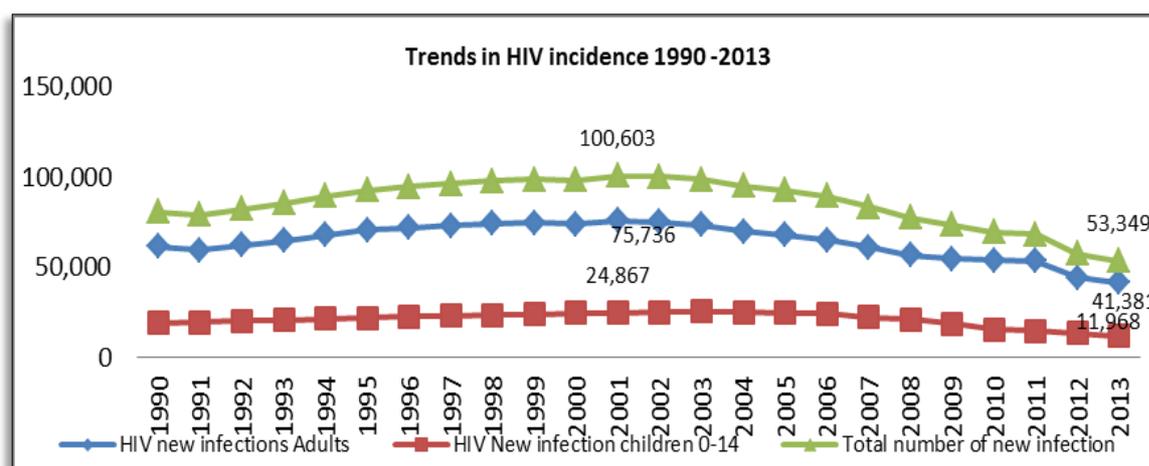
⁵Spectrum Policy Modelling System, Version 5.03_500 (2014); Zambia Model March 2014

Figure 5: Spectrum projection of HIV prevalence by age



Source: Spectrum Policy Modelling System: Zambia Model, March 2014

Figure 6: Projected HIV incidence trends 1990 - 2013



Source: Spectrum Policy Modelling System, Version 5.03_500 (2014); Zambia Model March 2014

2.1.6 HIV Mortality Trends

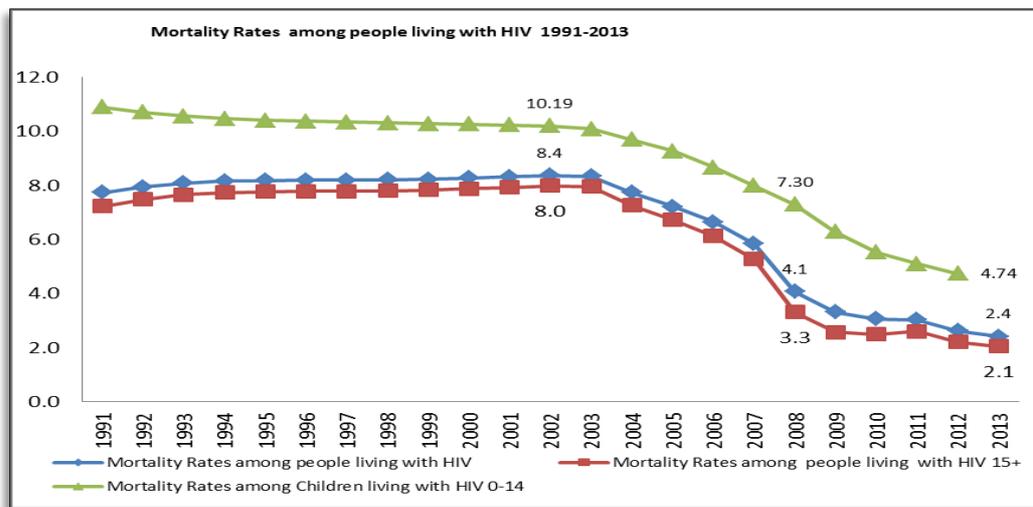
The Vital Registration System in Zambia is not optimally functional. While it is up-to-date with registering of births, the registration of deaths is a serious challenge and gap. In the absence of reliable mortality data from the Vital Registration System, estimates from Spectrum are used to plot HIV-related mortality trends. The estimated mortality rate from AIDS in adults aged 15 years and older has decreased from a peak of 8% in 2002 to 2.1% in 2013. As the ART programme is scaled up, HIV-related mortality is expected to decline. Currently, survival and retention of people on ART at 12 months has increased from 65% in 2010 to 81% in 2013⁶. Similarly, mortality attributable to AIDS in infants reduced from a peak of 10.19% in 2003 to 4.74% in 2013⁷. This reduction in mortality and increase in

⁶Ministry of Health: Health management information system

⁷ Spectrum Policy Modelling System, Version 5.03_500 (2014); Zambia Model March 2014

survival and retention in care is due to a large extent to the concerted efforts of the Government and its partners in improving access to ART.

Figure 7: Mortality Rates among People Living with HIV 1991-2012



Source: Spectrum Policy Modelling System, Version 5.03_500 (2014); Zambia Model March 2014

2.2 Epidemiology of HIV and TB

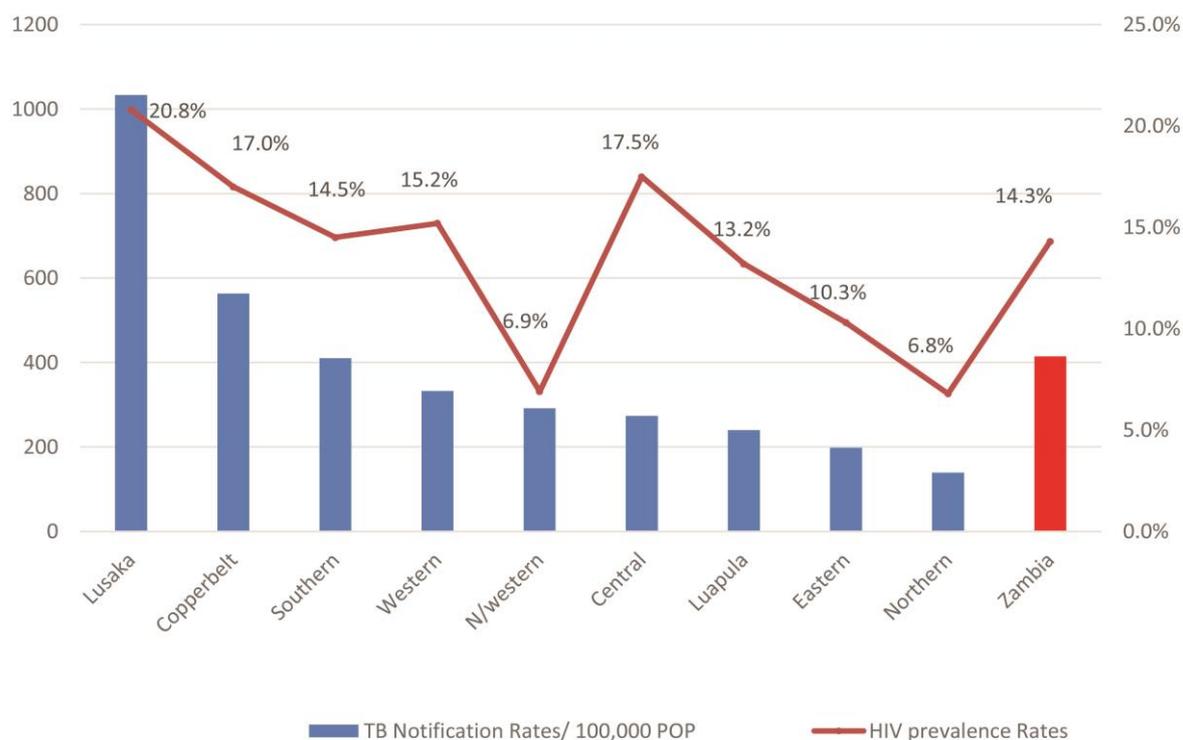
HIV and TB in Zambia share common epidemiological patterns, which present opportunities for joint programming. For instance:

Geographical Similarities: The provinces with the highest HIV prevalence rates are also the provinces with the highest TB case notifications, namely Copperbelt, Lusaka, and Southern. See figure 8 below.

Age: The age group with the highest HIV prevalence is adults aged 15-49 years (women 16.1% and men 12.3%, DHS 2007) and most TB notifications are highest in this age group. The peaks for TB notification correlate with those for HIV prevalence in the 33-45 age group.

Co-morbidity: In 2013, 62% of TB patients were co-infected with HIV (NTP Programme Data. 2013). The TB prevalence rate in PLHIV is unknown.

Figure 8: TB case notification rates compared to HIV prevalence by provinces - 2007



Under-served populations: The HIV and TB epidemics share similarities in the two populations that are underserved: Children and prison inmates. Access to care in both groups is sub-optimal, as evidenced by the ART coverage at 52% in 2013 and TB notifications at 8% of the total notifications, respectively.

Death rates: Data available for two years, 2009 and 2010, shows that death rates were higher than the national average death rates for TB patients among the HIV-infected TB patients: 10% in 2009 and 9% in 2010, against a national average of 5%.

2.3 Factors Impacting HIV Transmission

Evidence through the 2007 DHS reveals that there were four risk groups common to both males and females. The risk groups are arranged by order of increasingly risky sexual behaviour. Slightly more men had never had sex than females – one possible explanation for this could be that more females started sexual activity before the age of 15. This could be due to the practise of intergenerational relationships between younger girls and older men. Interestingly, more females (70%) were calculated to belong to the low-risk group compared to only 49.2% of males. Also more males belong to the high-risk group (4.7%) than females (0.6%). The implication is that fewer females were engaging in medium risk and high risk sexual behaviour compared to their male counterparts. It can also be inferred

that more males have had multiple and concurrent partnerships compared to females and that there were fewer females engaging in sex work than there were men employing the services of sex workers. The data below shows the estimated distribution of males and females by sexual risk group in 2007.

Table 2: Distribution of the Population by Risk Group

Distribution of the Population by Risk Group (15-49)	Value	Source
Percentage of males		
Not sexually active (Never had sex)	17.0%	DHS Zambia 2007
Low-risk heterosexual (One partner in the last year)	49.2%	Calculated
Medium-risk heterosexual (> one partner in last year)	29.1%	DHS Zambia 2007
High-risk heterosexual (Client of sex worker)	4.7%	DHS Zambia 2007
MSM	0.1%	MOT Zambia 2009
Percentage of females		
Not sexually active (Never had sex)	14.3%	DHS Zambia 2007
Low-risk heterosexual (One partner in the last year)	70.7%	Calculated
Medium-risk heterosexual (> one partner in last year)	14.5%	DHS Zambia 2007
High-risk heterosexual (Sex worker)	0.6%	MOT Zambia 2009

2.3.1 Sexual Debut

There are signs that more young people delay sexual debut and remain sexually abstinent for longer. There was a significant decrease in the proportion of young females and males aged 15-19 years who reported having had sex by the age of 15 years over the last three DHS rounds. The trend of delaying first sex is reflected in changes in median age at first sex among both young males and females aged 15-24 years. Between 1996 and 2007, it increased from 15.9 years to 17.9 years in young men and from 16.6 years to 17.2 years in young women. Reported sexual debut was significantly higher in rural women aged 15-24 than in urban women. For men, age at first sex was only slightly higher in rural residents than in urban residents. Since HIV prevalence is higher in urban areas, early sexual debut alone cannot be regarded as a major risk factor for HIV infection.

2.3.2 Multiple and Concurrent Partnerships (MCP)

Viral loads are highest during the first 6-8 weeks of infection. Therefore, concurrent relationships raise the risk of the number of people who are infected over very short time periods – thus accelerating the spread of HIV. Reports of MCP behaviour indicate that it is prevalent among all sexually active age groups. In Zambia, men consistently report a much higher frequency of multiple partnerships than women. In the 2007 DHS, 20% of men aged 15-49 years said that they had more than one partner in the past 12 months, whereas only 1.6% of women reported more than one partner in the same period. For men, the frequency was highest in the Southern Province (31%) but there was virtually no difference between rural and urban men regarding this variable. For women, the frequency was highest in the Western Province (4.1%) and was significantly higher in urban (2.1%) than in rural areas (1.3%).

There is a declining percentage of adults aged 15-49 years reporting having more than one partner. In men, the frequency dropped from 29% (1996) to 14% (2007), and in women, it dropped from 3.6% (1996) to 1.2% (2007). There were decreases in the mean number of reported partners in the past year between 1996 and 2007. In men, the mean number dropped from 1.5% (1996) to 0.94% (2007) and in women it dropped from 0.8 (1996) to 0.76 (2007). Frequencies of reported extramarital sex decreased in men and women, from 19% (1996) to 13% (2007) in men and from 1.5% (1996) to 0.7% (2007) in women. Fewer young people aged 15-24 years reported multiple partners. The percentage of young people reporting multiple partners showed significant decreases in females and males between 1996 and 2007.

Identified Factors Contributing to MCP Behaviour (MOT, 2009 list)

- i. Mobility, providing opportunities for both partners to have other sexual relationships;
- ii. Alcohol, peer influence, upbringing, desire for luxury material possessions and the adoption of a certain lifestyle;
- iii. As a safeguard in case a partner should terminate a relationship;
- iv. Poverty and the disintegration of the family safety net (females are particularly affected as they seek support for themselves and their families);
- v. Some traditional cultural practices such as girls' initiation ceremonies and men having more than one sexual partner (polygamous system);
- vi. Cultural norms that expect women to be passive sexual partners contribute to the sexual dissatisfaction of both partners in a relationship;
- vii. Attitudes around circumcision (some circumcised men believe they are protected against HIV);
- viii. Mistrust, suspicion, misunderstandings and mistreatment in relationships, lack of sexual satisfaction (particularly in the case of married couples), as well as lack of communication;
- ix. Women wanting to get married, searching for a suitable partner;
- x. Married men and women to have a child, in cases when couples struggle to conceive;
- xi. Those forced into marriages as a result of parental pressure or premarital pregnancies and unhappy with their partner;
- xii. Women's sexual abstinence for months after child birth, which is a cultural practice;

2.3.3 Low and inconsistent use of male and female condoms

Despite increased availability of both male and female condoms, condom usage remains low. Although significant efforts have been made to empower women to take control of their sexual and reproductive health (SRH), there is still evidence that women are less likely to negotiate and/or demand the use of condoms with male partners.

Identified Factors Impacting condom use

- i. Low use among those affiliated with religious groups that do not advocate condom use;
- ii. Condom use is higher among partners who engage in casual sex;

- iii. Higher education levels and higher levels of income are not associated with higher levels of condom use;
- iv. Negative perceptions about how condoms affect sexuality and sexual pleasure are barriers to use;
- v. Practices that are not conducive to condom use e.g. dry sex practices;
- vi. Inadequate knowledge and skills on correct usage of female and male condoms among both health care providers and the public;
- vii. Lacking the ability to negotiate for condom use in stable relationships as well as the casual encounters by partners;
- viii. Poor access to both male and female condoms especially in rural areas;

2.3.4 Low levels of male circumcision

Medical research reports that male circumcision may be effective at lowering the risk of female-to-male sexual transmission of HIV by up to 60%. In Zambia, few males are circumcised. According to the ZDHS of 2007, only 13% of Zambian men aged 15-49 years had been circumcised. North-Western and Western provinces have a tradition of male circumcision, where 71% and 40.2% of men are reported being circumcised, respectively, with Muchinga, Luapula and Northern Provinces being newer to the practise. HIV prevalence among circumcised men was 10% compared to 12.5% among uncircumcised men (ZDHS 2007).

2.3.5 Education and HIV and AIDS Knowledge

Knowledge of HIV and AIDS is high among young people aged 15 -24 years. More than 90% of them have heard about HIV. However, comprehensive knowledge⁸ about HIV and AIDS remains low. Only 36% of women and 39% of men have comprehensive knowledge. Comprehensive AIDS knowledge is highest in women and men with the highest school education but HIV prevalence is also highest in these groups. More educated people are significantly more likely to be HIV infected.

There is a positive association between the level of comprehensive AIDS knowledge in a province and provincial HIV prevalence, particularly in women, as illustrated by Figure 12. In provinces with relatively high comprehensive AIDS knowledge in women (Lusaka and Copperbelt), female HIV prevalence is at its highest for Zambia. This pattern does not hold for Central province, where female HIV prevalence is also very high but AIDS knowledge is relatively low. In men, the relationship is less clear-cut and only in Lusaka province is there both relatively high comprehensive AIDS knowledge and high HIV prevalence.

A possible explanation for the observed correlation is that in the provinces with higher HIV prevalence, people may be more concerned about the HIV epidemic than in provinces with

⁸A person is considered to have comprehensive knowledge about HIV/AIDS when they say that use of condoms for every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting HIV, that a healthy-looking person can have HIV, and when they reject the two most common misconceptions that HIV can be transmitted through mosquito bites and that a person can become infected with HIV by eating from the same plate as someone who has HIV.

lower HIV prevalence and hence more receptive to HIV and AIDS education. Furthermore, information, education and communication (IEC) activities are more concentrated in areas of the country which are more affected by the HIV epidemic, further explaining why knowledge is higher in more affected areas.

2.3.6 Marriage Patterns and Polygamy

Marriage occurs relatively early in Zambia and all, except a few women and men, eventually marry. Less than 2% of women aged 35 years and older and less than 1% of men aged 45 years and older had never married (ZDHS 2007). Men tend to marry at older ages than women and many women bear children before entering a stable union. Marriage and cohabitation are generally considered to be primary indicators of exposure to the risk of pregnancy. Informal relationships are common and women may have children in the context of such unions. The proportion divorced or widowed generally increases with age.

Polygamous marriages are relatively frequent. In the 2007 DHS, 14% of women were in polygamous marriages and 8% of married men had more than one wife. By definition, more married women than men are in polygamous unions but the 2001/2 DHS report also states that there may be a difference in classifying girlfriends, that is, a tendency for women to report their husbands' girlfriends as wives, while their husbands do not. The prevalence of polygamous unions increased with age for women and men and decreased with increasing education for women and men (ZDHS, 2007). Rural women and men were significantly more likely to be in polygamous unions (W: 19%, M: 10%) than urban women and men (W: 6%, M: 3%, ZDHS, 2007). Provincial differences were marked: 25% of married women in Southern province were in polygamous unions, compared with only 4% of women in Lusaka province. Polygamy was also high in Eastern and Western provinces, with more than 20% of married women in polygamous unions.

2.3.7 Cultural Norms

Some Identified Cultural Practices that Facilitate HIV Transmission

- i. Sexual cleansing practiced in most provinces. The ritual involves a woman having sex with a member of her deceased husband's family to purge the spirit of her deceased husband;
- ii. There is no requirement for HIV testing prior to the cleansing. The practice has been outlawed by the Penal Code Amendment Act but is still a source of concern;
- iii. Widow inheritance mainly prevalent in Central and Lusaka provinces. This is a practice where a member of the family of the deceased succeeds and marries or inherits the widow;
- iv. Dry sex through the use of herbs by women to dry the vagina before sexual intercourse;
- v. Traditional circumcision involving sharing of blades and knives and the initiates having sex with an elderly lady before the wound is completely healed;
- vi. Premarital unprotected sex to prove fertility of young girls;
- vii. Wife sharing with king as a sign of welcome; and

- viii. Traditional treatment of infertility by a healer having sexual intercourse with the woman client.

Married women may also be negatively affected by some cultural norms, like the expectation that women do not question their husbands' actions; that women serve men; that women depend on their husbands for finances; and that women not deny their husbands sex. Furthermore, women may be expected to accept their husbands' extra-marital sexual affairs.

2.3.8 Age-Disparate Relationships

The terms "cross-generational sex" or "inter-generational sex" are usually used for sexual relationships where there is a 10-year age gap or more between the two partners. The term "age-disparate relationship" is used in relationships where the age gap is more than 5 years. Age disparate relationships have been cited in Southern Africa as a reason behind the higher prevalence of HIV among young women than young men. In Zambia, couples with large age gaps between partners have a higher risk of being HIV positive.

2.3.9 Transactional and Commercial Sex

Closely related to age-disparate relationships, is the phenomenon of transactional sex (involving transfers of money, gifts or favours). Age-disparate relationships are often also transactional and there is a continuum between transactional and commercial sex (sex in exchange for money).

The Corridors of Hope (COH) project in Zambia has provided HIV prevention interventions since 2000 to most-at-risk populations, mainly to Female Sex Workers (FSWs) and their frequent sex partners the Long Distance Truck Drivers (LDTDs). To monitor behavioural activities related to HIV infection among most-at-risk populations, the COH project carries out Behavioural Surveillance Survey (BSS) studies. One of these studies is the BSS among FSWs.

Key findings related to FWS sexual behaviour include:

- i. Most FSWs start sexual activity at an early age and continue to engage in sex work well into their late 20s or early 30s;
- ii. Most FSWs are not indigenous to the areas where they work;
- iii. Alcohol use is a FSW social activity and a way of meeting sex clients;
- iv. The proportion of FSWs opting for VCT is high; and
- v. Sex workers are more likely to practice safe sex with paying partners than with non-paying partners.

2.3.10 Sexual and Physical Violence

Sexual violence and Gender Based Violence (GBV) are serious issues for human rights and public health, which disproportionately affect women and girls of all ages, from all cultures, countries and socio-economic backgrounds. These types of violence take many forms, including rape, domestic violence, forced marriage, exploitation and harassment, sexual

slavery, forced prostitution, human trafficking, and genital cutting. Sexual violence against females is a problem in Zambia and most females know the perpetrators of this violence.

The prevailing gender attitudes and status of Zambian women can be illustrated with the following local data:

- i. In the Central European Institute of Technology (CEIT) baseline survey (analysed by Anderson et al., 2007), 34% of Zambian women and 38% of Zambian men said that in their culture it is acceptable for a man to beat his wife; and
- ii. In the ZDHS of 2007, it was found that among currently married women, the degree of sole decision-making ranged from 14% in decisions on major household purchases to 60% for daily household purchases. In 44% of cases, the husband mainly decided large household purchases and in 34% of cases, the husband mainly decided on the spouse's health care. More educated women and those with cash incomes had much higher levels of participation in decision-making within the couple.

2.3.11 Alcohol Use

Several Zambian studies report alcohol use and risky behaviours under alcohol influence to be prevalent⁹:

- i. Sexual intercourse under the influence of alcohol takes place, especially in urban areas. In 2007, 14% of 15-24 year old Zambian respondents had sexual intercourse in the past 12 months when drunk or with a partner who was drunk (ZDHS 2007). The prevalence of intercourse while drunk was particularly high among the older men in this age bracket and was higher in urban residents, men without education and women with higher education or higher income. In the ZSBS 2003, 20% of males reported that they or their non-regular partners took alcohol during the last sexual intercourse. This percentage was much higher for urban males compared to rural males. Among females, 18% reported that alcohol was involved at last sex and the urban-rural pattern was similar. Males are usually more likely to use alcohol than females and tend to drink more.
- ii. Magnani et al (2000) found that among the youth in Zambia, alcohol and drug use was a risk factor for having sex, having multiple sexual partners and having more than one partner during the last three months. The same study also found that alcohol consumption decreased condom use. Mukuka (2000) found that male youth (no age specified) in Lusaka were frequent customers at places that sold illicit alcohol. In a study in Lusaka among students, Mbulo et al. (2007) conclude that drinking behaviour, alcohol-sexual expectations, educational level and religion are associated with lower use of condoms. Significantly more college students had consumed alcohol than high school students. The odds of college and university students engaging in unprotected sex after drinking were almost four times higher than for high school students. The odds of students with multiple sexual partners engaging in unprotected sex after drinking were 3.6 times higher than for students with one sexual partner.

⁹ Zambia National HIV/AIDS/STI/TB Council. 2009. "Zambia HIV Prevention Response and Modes of Transmission Analysis". Lusaka

2.3.12 Mobility and Labour Migration

Labour migration is common in Zambia, most often in search of employment. Provinces with highly mobile populations and many migrant labourers such as Lusaka and Copperbelt have higher HIV prevalence rates than provinces with less labour migration. Whilst both men and women migrate in search of work, they migrate to different geographical locations and for different opportunities. Sectors or types of work that generally employ high numbers of mobile and migrant workers are mining, commercial agriculture, transport, construction, domestic work, uniformed services (including military personnel and immigration officials), informal cross-border trade, fisheries and sex work. Certain sectors attract women migrant workers in particular, such as trade and sex work. Women who migrate are particularly vulnerable to gender-based violence and sexual exploitation during their journey putting them at significant risk of contracting or spreading HIV. Informal cross-border traders – many of whom are women – are highly vulnerable to exploitation and abuse, in part because of their irregular migration status. Local behavioural surveillance data show high risk behaviours by long distance truck drivers and there is evidence of a link between mobility and HIV prevalence.

2.3.13 HIV Prevention and Care in Children

The transmission of HIV from an HIV positive mother to her child during pregnancy, delivery or breastfeeding is one of the key drivers of the HIV epidemic in Zambia. Vertical transmission of the virus from mother to child at birth or during breastfeeding accounts for 90% of HIV infection in children and is an essential intervention area to reduce incidence amongst children. Without treatment, one third of infants living with HIV die before their first birthday and half before their second birthday as a result of opportunistic infections and inter-current common diseases such as pneumonia, diarrhoea, malnutrition and malaria. HIV transmission rate from mother to child, including during breastfeeding declined from 24% in 2009 to 12% in 2012. This represented a 51% decrease in the number of new HIV infections among children between 2009 and 2012. New HIV infections among children (0-14 years old) declined from 19, 000 in 2009 to 11, 000 in 2011 and to 9, 500 in 2012. The percentage of infants tested for HIV at two months of age increased from 21% in 2010 to 57% in 2012. A total of 160, 000 children aged zero to 14 years were estimated to be living with HIV in 2012. Of these, more than 89, 000 needed antiretroviral therapy (ART). The percentage of eligible children (0-14 years old) receiving antiretroviral therapy increased from 23% in 2009 to 38% in 2012. By the end of 2013 only 49, 416 children aged zero to 14 years were receiving antiretroviral therapy.

Zambia changed the PMTCT implementation model from PMTCT option A to Option B+ in 2013. PMTCT option B+ makes the elimination of mother to child transmission much simpler and more effective. In this model all HIV positive pregnant women receive treatment immediately and for life, regardless of CD4 count and all infants are provided with one pill, once a day from birth through four to six weeks regardless of the feeding method. These simplified and consistent treatment options will help to streamline operations, procurement and supply management and will strengthen the linkages between the eMTCT and ART programmes at the community level. Option B+ can be a

catalyst to decentralise ART care and help Zambia take a big step in bringing health services closer to the people.

In addition to the operational benefits, there are enhanced health benefits to infants, mothers and the mothers' HIV-negative male sexual partners of adopting for B+. These include:

- i. Lower transmission to infants: more women will already be receiving lifelong treatment initiated in earlier pregnancies, which is likely to lower the total number of new infant infections both during pregnancy and the breastfeeding period;
- ii. Improved maternal health: the new regimen of triple ARVs is likely to decrease HIV related illnesses from opportunistic infections (Cohen M. et al, 2011) and increase maternal survival for those who adhere (Schouten, 2011). This reduces the number of orphans needing support and is likely to have an indirect impact on reducing under-5 deaths (Anema A. et al, 2010); and
- iii. Lower transmission to HIV-negative male sexual partners: The HPTN 052 study demonstrated that transmission rates to HIV-negative partners are lower for individuals who are initiated early on ART (Cohen M. et al, 2011). Putting more HIV-positive women on lifelong ART sooner with Option B+ is therefore expected to avert more adult infections than the other treatment options.

Overall, option B+ is likely to have a greater impact in reducing infant HIV infections, increasing maternal survival and reducing transmission to HIV negative male sexual partners than the current eMTCT programme (option A) and option B. These benefits will have a continuing positive impact in the future, both during future pregnancies and in protecting HIV-negative male partners. Option B+ is, therefore, considered the best available method to eliminate MTCT.

2.3.14 Sexually Transmitted Infections (STIs)

STIs remain a major health problem in Zambia. If left untreated, they may have adverse consequence on both reproductive health and child health and are intimately related to HIV transmission. According to the ZDHS of 2007, 4% of women and 5% of men age 15-49 years in Zambia were found to have syphilis. Of all eligible respondents aged 15-49 years who were tested for syphilis, 7% were found to be positive on the screening test (RPR) and 4% were found to be positive on both the screening test and the confirmatory test (TPHA). In the ZDHS 2001-2002, 9% of respondents had tested positive for syphilis on the screening test and 7% tested positive on the confirmatory test. Although prevalence of syphilis declined between the 2001-02 survey and the 2007 survey, the difference is not statistically significant.

The population testing positive on both syphilis tests rose rapidly with age, from a low of 1% in the 15-19 age group to a peak of 8% in the 30-34 age group, then fell to 3% in the 35-39 age group and varied among older age groups. The pattern varied slightly for women and men, peaking in the 40-44 age group for men. Syphilis prevalence was similar for women in urban and rural areas (3 and 4%, respectively) and was the same (5%) for men in urban and rural areas. Southern (9%), Western and North-Western provinces (6%) and Lusaka (5%) had prevalence levels above the national average. The lowest syphilis

prevalence was among respondents with more than secondary education. Men reporting higher-risk sex had higher syphilis prevalence (8.1%) than men not reporting higher-risk sex (3.8%). Syphilis prevalence was much higher among men who paid for sex (12.6%) than those who did not (4.2%). In women, syphilis prevalence was only 1.6% in those reporting higher-risk sex but 4.9% in those women not reporting higher-risk sex.

Syphilis tests are also performed in Antenatal Care (ANC) clients within the ANCSS. In 2006, the mean site syphilis prevalence among pregnant women aged 15 – 39 years was 5.5%, which was similar to population prevalence. Sites with syphilis prevalence of 10% or higher were Solwezi (North-western province) with 10%, Kalabo (Western province) with 11% and Nchelenge (Luapula province) with 15%. A positive syphilis test was associated with never having had a live birth, stillbirth in last pregnancy and interval since last birth of less than one year. Similar to the trend in the adult population, syphilis prevalence showed a slight downward trend in ANC clients. The mean site prevalence among pregnant women aged 15 - 39 years was 7% in 2002 and 5.5% in 2006.

Herpes Simplex Virus-2 (HSV-2), which causes genital herpes, is widely prevalent in Zambia. A cross-sectional population-based study in Ndola found HSV-2 prevalence levels of 55% in women and 36% in men (Weiss et al., 2001). HSV-2 prevalence rose rapidly in teenage girls and young men in their 20s. In multivariate analysis, being married, divorced or separated, as well as having had higher numbers of lifetime partners, were significantly associated with HSV-2 infection in women and men. In contrast, age at first sex and male circumcision status did not seem to be linked to HSV-2 status. HSV-2 positive individuals were over four times more likely to also be HIV positive (statistically significant in men and women). Sadoki & Reid (2004) found in high risk HIV negative women in George and Matero compounds in Lusaka that 56% were seropositive for HSV-2. Among HIV positive women, 73% were seropositive for genital herpes. Commonly observed presentations of HIV-2 in these women were vulvar vesicles, gluteal vesicles, pustules and ulcers and cervicitis with vesicles, pustules and ulcers.

Respondents with a history of STIs or STI symptoms had substantially higher level of HIV infection than those with no history of STIs or STI symptoms. Women who had an STI or STI symptoms in the past 12 months were twice as likely to be HIV positive (34%) as women who did not have an STI or STI symptoms (17%). Similarly, men who reported having an STI or STI symptoms in the past 12 months (30%) were more than twice as likely to be HIV positive as men who did not report any STI or STI symptoms (13%).

2.4 National Response Key Achievements and Challenges

2.4.1 HIV Prevention

The prevention response in Zambia is guided by two national strategies, namely the NASF 2011-2015 and the Zambia National HIV STI Prevention Strategy 2009-2014. The revised NASF identified nine prevention programme areas:

- 1) Social and behavioural change (SBC);
- 2) HIV testing and counselling (HTC);
- 3) Condom promotion and distribution;
- 4) Voluntary medical male circumcision (VMMC);

- 5) elimination of mother-to-child Transmission of HIV (eMTCT);
- 6) Prevention interventions for people living with HIV (PLHIV);
- 7) Post-exposure prophylaxis (PEP);
- 8) Sexually transmitted infections (STI) screening and treatment; and,
- 9) Blood safety.

The key achievement of the prevention pillar, as reported in the JMTR 2013, was the decrease in the incidence rate in adults (15+ years) from 1.6% (82, 000) in 2009 to 0.8% (46, 000) in 2012. The rate of infection in children (0–14 years old) also dropped by up to 51% by 2012. The findings from the ongoing DHS will provide updated impact data on social and behavioural change, condom programming, STI, and blood safety interventions to date.

Adoption of Option B+ will demand regular monitoring of the clinical progress of the patient to assure optimal performance of the prescribed regimen. In addition, certain tests will need to be administered before treatment is initiated. At minimum, a haemoglobin test, a urine dipstick for protein and bilirubin (as proxies for renal and liver functions respectively) and a tuberculosis diagnostic test should be performed before initiation of treatment. Further, although treatment can be initiated based on the package of tests described above, the following tests must be available for patient monitoring purposes, either on site or through referral: CD4 count test, Chemistry tests, Syphilis test, Early infant diagnostic test, Viral load tests.

If survival rates of the HIV positive woman are to improve, access to laboratory monitoring will need to be enhanced to consistently ascertain the efficacy of the regimen and drug toxicities. Overall, with the move to B+, a larger number of tests will need to be performed and access to laboratory services will need to be improved to make this possible.

The use of point of care devices should continue to be encouraged and quality assurance systems for all point of care diagnostics should be strengthened. Although not yet widely available, viral load tests are the most suitable tests for patient monitoring. Current efforts underway to make this test available to all patients in need should be hastened. Due to infrastructural and funding limitations, an immediate cost effective measure will be the introduction of a sample referral system. In the roll out of Option B+, programme planners and implementers will develop a robust national referral system with a documented quality management plan and a communication strategy targeting the beneficiaries.

2.4.2 Social and Behaviour Change

In 2012, Zambia adopted an HIV strategy for advocacy and social and behavioural change communication (SBCC) and rolled it out through various strategies targeting adolescents. The SBCC initiatives have strategically targeted key drivers of transmission and the messages have included promoting the delay of sexual debut (primary abstinence) in adolescents and youth, faithfulness in marital or stable unions and condom use during sexual intercourse.

In 2012-2013, key SBCC interventions prioritised television and social media channels (e.g. Safe Love, Loves Games) and featured Zambian celebrities as role models (e.g., Brothers

for Life) to address social norms around condom use, HIV testing, multiple sexual partnerships, gender-based violence (GBV) and alcohol abuse among adolescent males. Targeted SBCC interventions for adolescents and youth using mobile phone technologies is emerging as a potentially cost-effective strategy to increase comprehensive HIV knowledge and the utilisation of high-impact HIV interventions. The National AIDS Council (NAC) and the Ministry of Youth and Sport launched the Zambia U Report, an adolescent-friendly, real-time and free SMS-based counselling platform on HIV and STI to increase comprehensive HIV knowledge and the uptake of biomedical prevention interventions by adolescents.

Achievements:

- i. The education sector is including comprehensive sexuality education in the teacher education curriculum;
- ii. Comprehensive sexuality education and life skills programmes reached 1, 070, 900 young children (5-9 years) and adolescents (10-19 years), including 45% of the boys and 55% of the girls in school from 2012 to 2013 (MoE Annual Report, 2013);
- iii. More than 1, 200, 000 young people aged 15 - 24 years, in- and out-of-school, received life skills education and were equipped with HIV prevention information to be able to adopt safer sexual behaviours (UNICEF, 2013);
- iv. SBCC interventions are integrated into routine biomedical programmes (eMTCT, family planning, ART, VMMC, HTC and condom distribution);
- v. At the community level, traditional and religious leaders have been involved in successful SBCC programme design and implementation. Community health volunteers and community health committees continue to support the promotion of safer and healthier behaviours, zero tolerance for stigma and discrimination and the demand for services through community mobilisation and door-to-door campaigns; and,
- vi. The 2009 survey of female sex workers in border and transportation routes with trend analysis 2000-2009 showed that condom use in the previous 30 days with clients increased from 17.7% in 2000 to 46% in 2009 (p. 36).

Challenges:

- i. Limited funding affects the scale of programming;
- ii. HIV prevention messages are often not harmonised to ensure that clear and non-conflicting messages are disseminated to community members;
- iii. There are inadequate SBCC materials in local languages and also are not adapted to suit local circumstances;
- iv. Behaviours related to some traditional beliefs are stigmatised; and,
- v. Limited opportunities exist for sustainable livelihood strategies targeting young people.

2.4.3 HIV Testing and Counselling (HTC)

HTC in Zambia is implemented using various strategies, including client and provider-initiated testing and counselling (PITC); mass campaigns; couples counselling and testing including discordant couples; peer outreach; mobile outreach services; male testing;

targeted campaigns for key populations (adolescents/youth, migrant workers, prisoners and geographically hard-to-reach populations); and, hot-spot targeting, among others. An integrated approach is implemented, where a full package of prevention interventions is offered at each contact. The primary health care (PHC) approach is also promoted with HTC offered along with SRH, TB and other PHC services.

Achievements:

The HIV testing and counselling programme has continued to show an increase in the number of people tested and counselled, although not at the desired rate. As of December 2013, the number of people aged 15 years and older who received HTC in the past 12 months and knew their results totalled 3, 005, 402 (National HMIS data). But this total represents only 41% of the national target (7, 330, 248).

Challenges:

- i. Scaling up access to couples counselling and testing remains a challenge;
- ii. Limited outreach opportunities exist for adolescents and youth and the issue of the legal age of consent is a related factor;
- iii. Testing for both sexes is low with only 21% of young men having tested in 2009 while their female counterparts had an impressive 51% testing rate;
- iv. Coverage of couples counselling and testing to address discordant couples is limited;
- v. Coverage of HTC is limited in rural areas. Home testing as an approach to reach more men needs to be scaled up;
- vi. HIV-related stigma is still a barrier to access; and
- vii. Quality assurance of all HTC programmes and at all sites needs to be rolled out.

2.4.4 Condom Programming

Two strategies for condom promotion and distribution are undertaken in Zambia. The first method is through the private sector, largely driven by Society for Family Health (SFH), which promotes and distributes condoms using the social marketing approach. As a commercial product, condoms are made available to end users at a minimal fee. The second method is through the public sector, largely driven by the MOH and the MCDMCH, promoting and distributing condoms at health care facilities (MCH, HTC, and Out-patient Departments) at no cost to the public. The 2014 condom targets were 41 million male condoms and 2 million female condoms, rising to 58 million male condoms and 1.5 million female condoms in 2015. The targets will rise to 82 million male and 2 million female condoms in 2016. The condom procurements are mainly supported through UNFPA.

Achievements:

- i. This two-pronged strategy has substantially increased access to condoms throughout Zambia, with 71, 502 condom outlets operating in 2013 and no condom stock-out reports by 60% of the retail outlets and service centres (NAC, 2013);
- ii. Condom use by members of high-risk groups has increased. For example, 81% of female sex workers reported using a condom at their last sexual encounter with a client (JMTR, 2013); and,

- iii. The Zambian military has succeeded in improving the acceptability and use of condoms by its female soldiers with 80% now using condoms, demonstrating that a strategy focused on women can break through stigma barriers.

Challenges:

- i. The NASF 2011-2015 targets remain largely unattained, with only 55% of men and women aged 15 - 49 years reporting in 2013 they used condoms during their last sexual encounter (NAC, 2013);
- ii. Inconsistent and/or incorrect use of condoms is still reported as a problem particularly among young people;
- iii. PLHIV report challenges in accessing supplies of condoms;
- iv. Gender inequality creates a significant barrier for women to negotiate condom use with their partners;
- v. Stigma is still a significant barrier to the uptake of condoms, and myths are still associated with their usage;
- vi. Condom distribution to religious groups that do not condone condom use remains a challenge;
- vii. Some key populations, including disabled persons and prisoners, are not included in condom demand creation interventions; and,
- viii. Some districts still experience occasional condom stock-outs.

2.4.5 Voluntary Medical Male Circumcision (VMMC)

Voluntary medical male circumcision (VMMC) was officially launched as an intervention to reduce the spread of HIV infection in 2007. The VMMC strategy offers facility-based and community-based VMMC services as part of a comprehensive HIV prevention package, including: HTC, condoms, screening and treatment of STIs and referrals for HIV-positive clients. The national VMMC operational plan was launched in 2012, with the goal of achieving 80% coverage of adult men aged 15 – 49 years by end of 2015, at which point the programme would transition to prioritising early infant male circumcision (EIMC).

Achievements:

- i. The number of sites providing VMMC services has increased from 135 in 2010 to 472 in the first quarter of 2013 (JMTR, 2013);
- ii. In 2012, a total of 173, 992 out of a planned 200, 000 VMMCs were performed. In 2013, a further 294, 466 procedures were carried out. Uptake is highest amongst adolescents and men up to age 30; and,
- iii. VMMC campaigns have helped reach vulnerable populations and mobile VMMC services have expanded access to remote areas, improving the acceptance of VMMC even in provinces where it was not traditionally practised.

Challenges:

- i. Staff skills, particularly in remote regions, continue to need support due to high attrition rates;
- ii. Limited quantities of circumcision kits are available due to funding limitations;

- iii. Circumcision of children is constrained by the current guidelines, which stipulate that children between 60 days and 8 years of age cannot undergo MMC without general anaesthesia, which is only available in hospital facilities;
- iv. Privacy at health facilities is limited;
- v. Private health facilities are not engaged in providing VMMC; and
- vi. Challenges remain with the acceptance of circumcision in some communities.

2.4.6 Elimination of Mother-to-Child Transmission of HIV (eMTCT)

The four-pronged approach to achieving eMTCT has been adopted in Zambia, which includes: Preventing HIV in women of reproductive age; Preventing unintended pregnancy in women with HIV; Preventing HIV transmission from mother to child; and Providing ongoing care and support to mothers, their children and their families.

The eMTCT programme has been introduced into clinic-based services throughout the country. To increase eMTCT coverage, the intervention has been successfully integrated into mother and child health programming, HIV treatment centres, HTC, STI clinics and other reproductive health service centres. The eMTCT package offers comprehensive services, including health education, HTC, prophylaxis to prevent vertical transmission, partner testing, screening and treatment of STIs and cervical cancer and family planning. This approach explicitly links with the country's 8-year Family Planning Scale-up Plan, demonstrating strong political support. Integration with other services has significantly increased women's access to PMTCT and improved the life opportunities for both mothers and their babies.

Achievements:

- i. Related to eMTCT is the National HMIS data indicating that the estimated number of pregnant women in 2012 was 723, 436. Of these, 688, 060 pregnant women (94%) attended ANC services at least once and were tested for HIV;
- ii. In 2013, 75, 165 out of 77, 772 of women living with HIV who delivered babies received antiretroviral medication to reduce the risk of mother-to-child transmission, representing 97% coverage (HMIS, 2013); and,
- iii. Zambia is on track to meet the target of reducing the number of new HIV infections in children by 90% by 2015. The risk of children acquiring HIV infection in Zambia from their mothers has gone down from between 30% and 45%, before the era of antiretroviral treatment (ARV), to 22% in 2010 and 9% in 2011 at age 6 weeks.

Challenges:

- i. A significant concern is the availability of resources for scaling up Option B+;
- ii. While approximately 94% of pregnant women attend antenatal care and, therefore, access HTC, only 47% of these women deliver at health facilities, posing a risk for their infants;
- iii. National data reveals that partner testing is low. Few men attend ANC clinics with women due to the lengthy queues at health facilities and the lack of services for men;

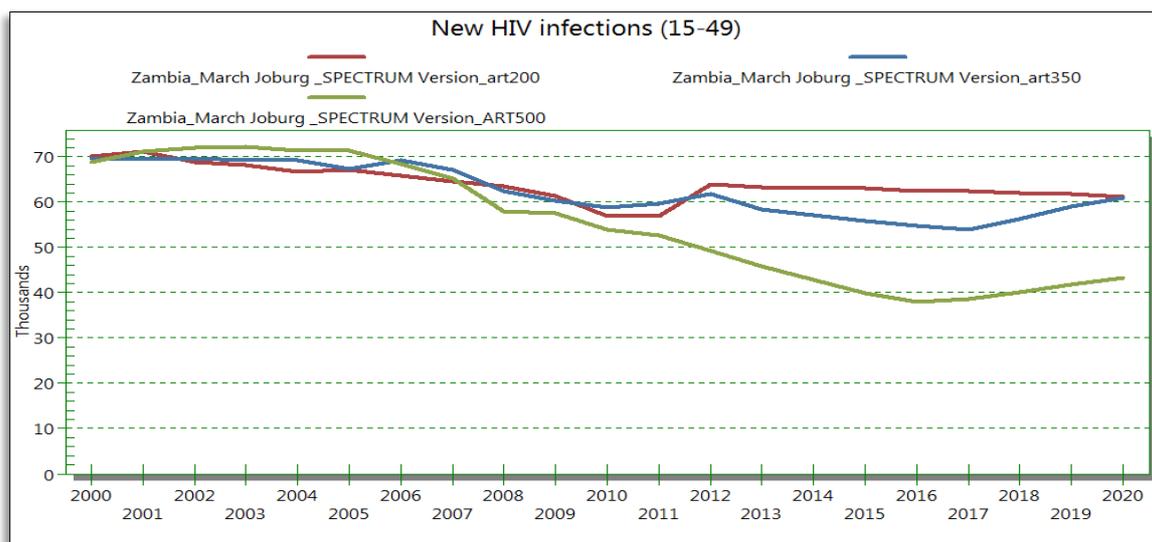
- iv. A significant number of mother-baby pairs are lost to follow-up due to weak linkages with communities. As a result, 50% of mothers and children do not receive ART during breastfeeding; and
- v. Supply chain constraints affect access to appropriate equipment for follow-on care and treatment.

2.4.7 Treatment Care and Support

Significant progress has been made in increasing and improving access to and the use of HIV treatment services. Policies, guidelines and operational standards are in place to ensure a cohesive national approach to treatment services and ensure that Zambia is up-to-date with the latest international standards. In February 2014 Zambia started implementing the 2013 Zambia Consolidated Guidelines for Treatment and Prevention, which are based on the 2013 World Health Organisation (WHO) treatment guidelines and will increase many patients' eligibility for treatment and expand the use of antiretroviral drugs for HIV treatment and prevention. In these new guidelines, the eligibility for life-long ART access includes: HIV-positive individuals with a CD4 less than 500; HIV-positive pregnant women regardless of CD4 (Option B+); and, an HIV-positive partner in a discordant couple.

The rationale behind the decision to change the CD4 threshold from 350 to 500 is based on a number of factors, including the findings on the HPTN 052 study, treatment as prevention,¹⁰ which provided definitive proof that antiretroviral treatment reduces the rate of sexual transmission of HIV. Further, according to the 2013 WHO Zambia Country Case Report on CD4 thresholds, the country stands to benefit more in reducing new HIV infections by implementing the new ART guidelines.

Figure 9: New HIV Infections Ages 15-49, 2000-2020, at ART 200, 350 and 500 CD4



WHO Spectrum Projection

¹⁰ Cohen, et al., 2011: Prevention of HIV-1 Infection with Early Antiretroviral Therapy, New England Journal of Medicine, Vol 365, No.6, p. 493.

The report concludes that if Zambia continues with the CD4 threshold of 350, only 50,000 new infections will be averted by 2020, while if the country implements the 500 CD4 threshold, 66,700 new infections will be averted in the same period (see Figure 12). Zambia, therefore, has decided to implement the 500 CD4 threshold for starting ART as a means of strengthening the prevention of new infections in all age groups.

The contribution to the total patients emanating from implementing the 2013 ART guidelines is estimated at 488 patients from the general population and 3, 641 pregnant women under option B-Plus per month, giving an annual total of 5, 856 (3.4% of total new patients) and 43, 692 (25% of total new patients), respectively. Treatment for children will contribute 4.4% to the total new patients in 2015.

The tables below summarise different contributions to the total.

Table 3: Zambia's Scale-up Plan by Patient Numbers:

Adults	Number of Patients per Month 2015
Scale-up based on 2013 data (2010 Guidelines)	9, 760
Implementing 2013 guidelines	488
Option B+	3, 641
Option A	0
Discordance	720
Total Monthly	14, 609
Paediatrics	
New Patients	686
Total (Adults & Children)	15, 295

Table 4: Projections of Average Monthly Scale up 2015-2017

	2015	*2016	*2017
Adults (15 & above))	14, 609	15, 632	16, 725
Paediatrics (<15)	686	734	785
Total	15, 295	16, 366	17, 511

**Assumed an increase of approximately 7% from the previous year*

Table 5: Babies needing Nevirapine (NVP) Suspension for HIV Infection Prevention

	2015	2016	2017
NVP for 6 weeks	61, 383	62, 795	64, 239
NVP for 6 months	3, 641	3, 768	3, 942

The contribution to the total new patients in 2015 based on the 2013 guidelines is minimal: at 3.3% from the general population, while Option B+, which is accessed by pregnant women and focuses directly on preventing new HIV infections in children, contributes 25%; and, discordance contributes 5%.

The prioritisation of the members of key populations is addressed by the following approach:

- i. **Option B+:** These individuals are identified at all antenatal clinics where HTC is conducted during the booking visit (first visit). In facilities where ART is provided, these identified individuals will receive ART, otherwise they will be referred to the nearest ART-providing facility (pre-existing ART facility or PMTCT facility that has

- been mandated to provide ART). The individuals will receive support from networks of people living with HIV and AIDS, community health workers and Safe Motherhood Action Groups (SMAGs);
- ii. **Discordance:** Couples counselling and testing is the mainstay strategy of Zambia's HTC guidelines and through this approach discordancy is identified at all HIV testing facilities and the HIV-positive partner is linked to care and the provision of ART under the 2013 guidelines;
 - iii. **Children (0-14):** The 2013 guidelines provide for all HIV-positive children to receive ART regardless of CD₄ count; and,
 - iv. **All members of key populations** who qualify for ART provision receive access to ART irrespective of their status or inclination.

The clinical recommendations in the new ART guidelines include:

- i. Start lifelong triple combination ART (cART) in the following HIV-infected individuals:
 - All confirmed HIV-infected children and adolescents <15 years old regardless of CD₄ count and/or World Health Organisation Clinical Stage (WCS); and
 - Adolescents ≥15 years old and adults with CD₄ count ≤500 cells/mm³ regardless of WCS.
- ii. Start lifelong triple combination ART regardless of CD₄ count and WCS in:
 - Pregnant and breastfeeding women;
 - HIV-infected sexual partners of pregnant and breastfeeding women;
 - HIV-infected partners in sero-discordant couples;
 - Patients with active tuberculosis (TB) disease; and,
 - Patients with hepatitis B virus (HBV) co-infection with severe liver disease.
- iii. Use the new, preferred, simplified first-line cART regimen (TDF + XTC + EFV) harmonised for pregnant and breastfeeding women, children >5 years old, adolescents and adults.
- iv. Accelerate the phasing out of stavudine (d₄T) and zidovudine (AZT) in first-line cART regimens for all populations;
- v. Use viral load testing as the preferred approach to monitoring cART and diagnosing treatment failure, in addition to immunological and clinical monitoring;
- vi. Use community-based HIV testing and counselling to diagnose people infected with HIV early and link them to care and treatment; and
- vii. Use lifelong ART as prevention:
 - For all pregnant and breastfeeding women to prevent mother-to-child transmission; and,
 - To reduce transmission of HIV to uninfected sex partners.

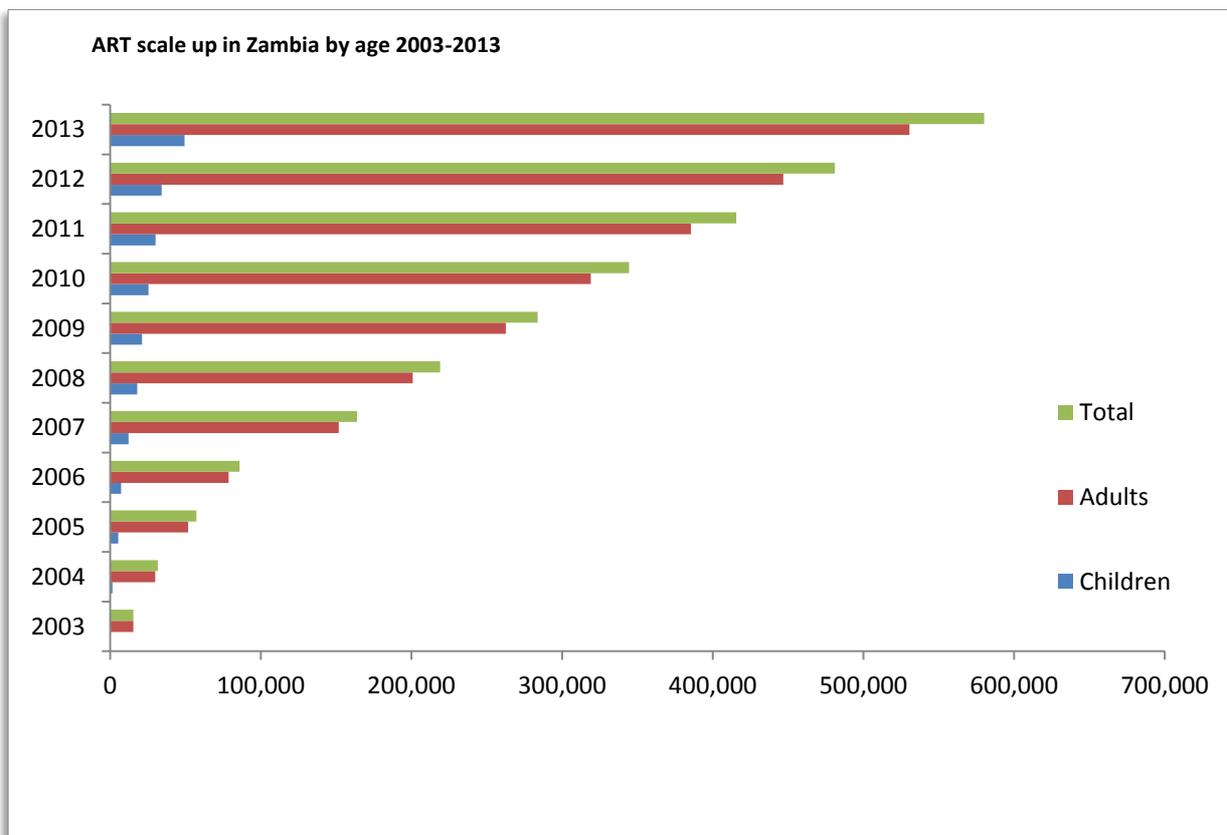
Achievements:

- i. In 2012, a total of 564 health facilities were dispensing ARVs in Zambia, which is an increase from 509 in 2011 (HMIS, 2013). As of December 2013, the number of children and adults receiving antiretroviral therapy in accordance with the

nationally approved treatment protocol was 580, 118 out of the 708, 460 people estimated to be in need of ART, representing 81.9% coverage (HMIS, 2013). ART coverage among children aged 0-14 years has remained relatively low with only 49, 416 children accessing ART treatment, representing about 55% of the actual need in children (HMIS, 2013); and,

- ii. At present the GRZ grant supports all patients in HIV care with cotrimoxazole. Although the 2013 guidelines on ART will add patient numbers, the individuals who have been on ART and doing well will graduate from cotrimoxazole prophylaxis and will be balanced by the number of new patients accessing ART.

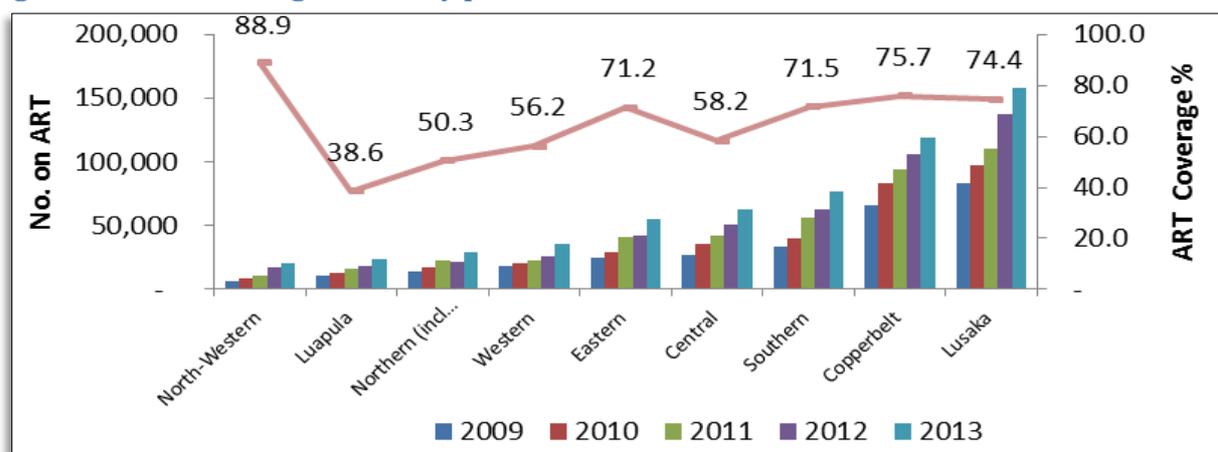
Figure 10: ART coverage 2003 -2013 disaggregated by Age



While there have been notable successes in the ART coverage of adults generally, some geographical variations in coverage exist across the provinces in Zambia.

ART coverage in Lusaka, Copperbelt, Southern, Eastern and North-Western provinces is estimated to be slightly above 70%.

Figure 11: ART Coverage trends by provinces 2009 - 2013



This coverage demonstrates a response to the epidemic based on the geographical variations in HIV prevalence noted in the 2007 DHS. There has been a relatively greater yield and coverage for the ART programme in the high-prevalence provinces. However, ART coverage for Luapula, Central, Northern and Western provinces has not reflected the prioritisation effort and they still demonstrate ART coverage below 50%. This geographical variation informs in part the prioritisation process and geographical targeting of this NASF.

Challenges:

- i. There is low Paediatric ART coverage, in part due to the low number of women delivering at health facilities but also due to significant delays in issuing test results for Paediatric patients and loss to follow-up;
- ii. Paediatric HIV training is limited and linkages between ART and MNCH clinics are weak, as are linkages between ART and non-ART sites. As a result, 60% of the eligible children are not receiving HIV treatment;
- iii. The slow pace of expansion of access to early infant diagnosis, especially in rural settings, remains a significant programmatic gap with a concomitant low ART coverage in children;
- iv. The limited number of health-care providers authorised to prescribe paediatric ART at the primary health-care level, the low coverage of provider-initiated testing and counselling (PITC) and parental stigma also have contributed to the low ART coverage in children; and,
- v. Human, infrastructural and financial resource challenges are still present. The adoption of the new WHO guidelines will place greater pressure on these resources, although the costing study has shown that the increase in human resources needed to support the ART scale-up will decline after the initial increase.

CHAPTER 3: R-NASF STRATEGIC ORIENTATION

3.1 The R-NASF Strategic Focus

Zambia has prioritised implementation of High Impact Interventions focusing on reaching key populations as part of its strategy to reduce new infections and improve life expectancy of PLHIV. The country, through NAC Council in 2014, has defined key populations as:

- People living with HIV;
- Women and children;
- Adolescents (10-14);
- Young people (15-24);
- People with disabilities;
- Prisoners;
- Sex workers and their clients; and
- Migrant and mobile populations.

The expanded list is a deliberate attempt by Zambia to ensure that populations with historical and disproportionate lack of service access are identified and considered for programming. Major factors contributing to this inequity include:

- i. Very limited data is available regarding several of these key populations. Although Zambia recognises that factors such as age, gender, education status, social mobility and the environment in which people live may increase the vulnerability of individuals and groups to HIV and its consequences, vulnerability is a fluid concept and can change over time depending on the opportunities or challenges faced by individuals and different groups. Based on two studies designed to address current data limitations that will be forthcoming in late 2014/2015, more evidence will be available for some key populations at high risk of infection to enhance programming and reporting. Reprogramming based on this fresh evidence will then be undertaken after designing appropriate and effective interventions for specific key populations;
- ii. In Zambia, activities relating to sex work, sex among same-sex couples and drug use are illegal. However, Zambian law grants universal access to health services for all citizens and programmes are designed with no exclusivity. Special programmes specifically designed for these populations have to be developed and brought to scale to help ensure that equity is increased. Support from Government in realising and protecting rights is a strategy that will be used going forward, which will be complemented by civil society efforts to further advocate health rights for affected sub-populations. Despite the current lack of legal frameworks for prevention activities for sex workers and MSM, Zambia has allowed groups to lobby support for these populations and some development partners have implemented programmes for these groups. Concurrently, efforts are being undertaken to scale up HIV services for key populations using a public health approach to ensure universal access;
- iii. Other barriers exist, such as the prohibition of condom distribution in school settings below the tertiary level. This prohibition affects adolescents who have been identified

as a high-risk group and should have access to any means of prevention. While the Zambian Constitution precludes discrimination based on a wide variety of factors, much work still needs to be done to redress the exclusion of groups who have heightened vulnerability to HIV infection;

- iv. Domestic violence and social norms on masculinity serve as other barriers to the uptake of HIV prevention and treatment services. While these barriers are present in various forms, including cultural acceptance, there is a need for programmes that target these societal challenges, particularly those to address the unequal power relations between men and women in relationships. For example, a 2007 baseline study by CIET showed that 34% of Zambian women and 38% of Zambian men said that in their culture it was acceptable for a man to beat his wife¹¹;
- v. In Zambia, the TB programme has identified mining communities, prisoners, the urban poor, children, as well as people living with HIV as key and vulnerable populations in respect to TB control. At present there are 56 prisons with an estimated 18,000 inmates. The estimated TB prevalence in Zambian prisons is 6.6% and HIV prevalence is 21.6% (unpublished data, S.Reid: WHO 3Is Protocol 2012);
- vi. The relatively poor service coverage for children aged 0-14 years is a challenge linked to equity in the national response to the two diseases. ART coverage, as noted earlier, is low in this age group and new TB case notifications in this age group have declined from 10% in 2009 to 8% in 2013; and,
- vii. According to key findings from the PLHIV Stigma Index, stigma remains a challenge in Zambia¹². Individuals have reported experiencing stigma in a variety of settings and about 30% of men and 36% of women have reported exclusion from social activities. Some 16.5% of the respondents had been refused employment due to their HIV status and 39.9% reported losing a job or some source of income at least once on account of their HIV status.

The emphasis on key populations in the Response increases the ability of any response to be implemented effectively. Individuals and populations can only reach their maximum potential if environments are supportive of their health needs and if services are provided in a non-discriminatory environment. Putting human rights and gender equality at the centre of the HIV response requires a major shift in coverage, content and resourcing of HIV programming. HIV programmes that fail to address gender related issues, sexuality, inequality and supportive legal environments fail to promote and protect the fundamental rights and freedoms of all groups in society and must be transformed.

Leaders must assess how legislation and law enforcement affect the HIV response and ensure that the law protects all people who access and use HIV services and support equality. In particular, leaders must implement protective laws to increase knowledge and understanding of the concept of universal access regardless of health status, age, gender, sexual orientation, drug use or sex work. The positive and proven impact of supportive legal

¹¹N. Anderson, et al: Gender-based violence and HIV: relevance for HIV prevention in hyper endemic countries of Southern Africa, AIDS 2008, 2 (suppl 4): S73-S86.

and policy environments can be seen across the world. Support from Governments in realising and protecting rights must be accompanied by efforts to enable civil society to claim these rights. Programmes that empower civil society to know and demand their rights need to be expanded significantly. These include programmes to reduce HIV-related stigma and discrimination, provide legal aid and legal literacy, reform laws, train police, and other service providers on non-discrimination, reach out to vulnerable populations, address violence against women and train health care workers on non-discrimination, informed consent and confidentiality. Such programmes are often part of national responses but they remain small, isolated projects. For an effective and successful national HIV response and for “Positive Health, Dignity and Prevention,” these programmes should be an integral part of every response and taken to appropriate scale.

Research has shown that interventions aimed at preventing new HIV infections among key populations can impact the broader epidemic. For example, targeting needle/syringe exchange among injecting drug users and among sex workers can limit transmission between sex workers, their clients and their partners. Furthermore, the provision of comprehensive services and the use of ARVs for prevention among men who have sex with men can limit new infections among them and their partners (Lurie, 2006). Legal and policy frameworks which uphold the human and public health rights of all people provide an enabling environment for increased access to interventions focused on key populations. More importantly, laws that outlaw same-sex behaviour, drug use and sex work have been shown to increase vulnerability to HIV and create barriers to accessing services, while also undermining basic human rights. The exclusion of groups who are at increased vulnerability to HIV, the acquisition of HIV and the impacts of HIV, or people who are on the margins of society, undermines the ability of any response to be effective, while contravening human rights and public health principles of freedom from discrimination and access to health services.

In the R-NASF it is anticipated that more evidence will be available for some populations at high risk in the near future to enhance programming and reporting, as two major studies of key populations are in progress. Reprogramming based on the findings of these studies will then be undertaken to formulate appropriate interventions to address specific key populations.

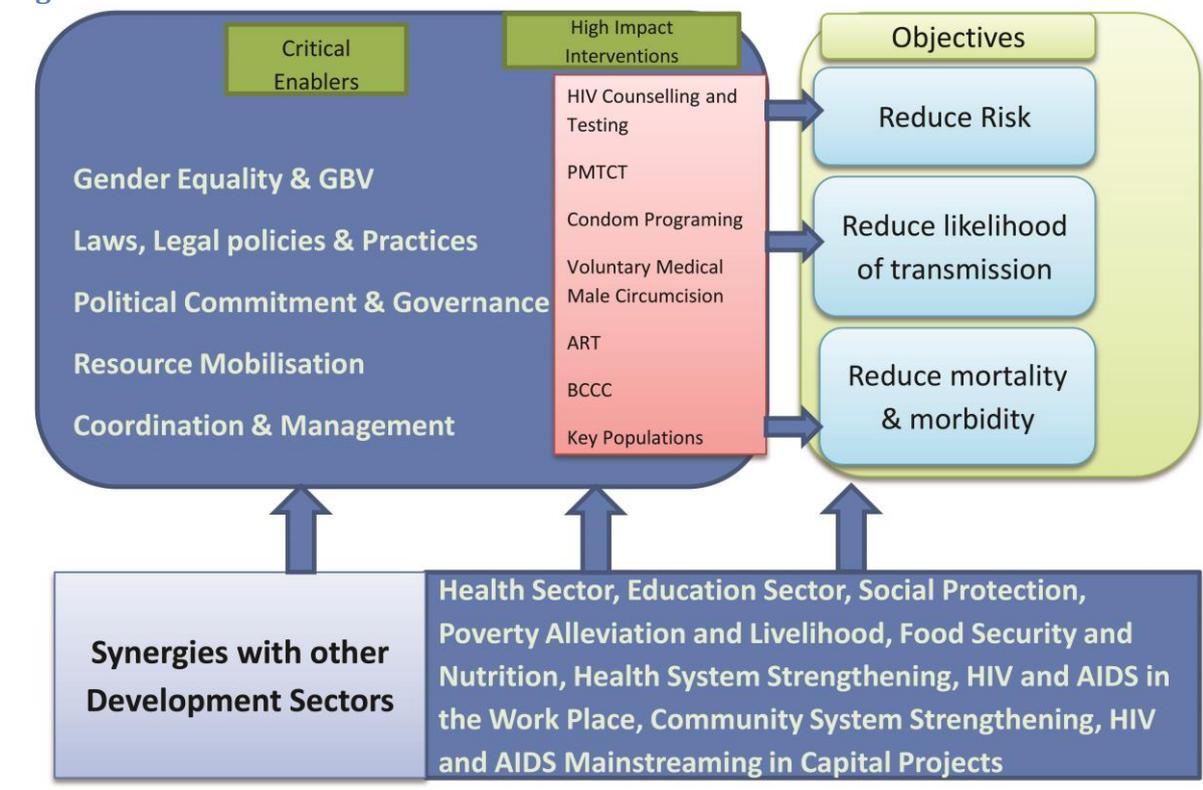
3.2 The Investment Framework

The investment framework takes as its starting point a human rights approach to the HIV response, to ensure that it is universal, equitable, inclusive and fosters participation, informed consent and accountability. The framework makes a distinction between basic programme activities that have a direct effect on HIV risk, transmission, morbidity and mortality; the critical enablers that are crucial to the success of HIV programmes; and, synergies with development sectors.

The implementation of the interventions and strategies outlined under this Framework are expected to contribute to the achievement of the outcome and impact targets and have been arrived at by considering the state of the epidemic in the country and the results of implementation efforts to the response thus far. The selection of the interventions and

strategies is premised on the need to focus on high impact interventions, with special attention being paid to key populations.

Figure 11: Prioritised Interventions - Modified from the UNAIDS Investment Framework



3.3 High Impact Strategic Interventions

The following section presents the prioritised interventions, strategies and results for the national response.

3.3.1 Treatment Care and Support

The goal of treatment, care and support is to reduce morbidity and mortality through universal access to comprehensive HIV/TB/STI treatment, care and support services and improve the quality of life for people living with and affected by HIV and AIDS. Treatment, care and support in the context of HIV and AIDS encompasses a continuum of actions and interventions at various stages including Pre-ART and ART as well as special attention to TB/HIV co-infection and nutrition and psychosocial support. The continuum includes activities that are conducted primarily in static health facilities combined with outreach to sites that bring services closer to people as well as home and community based activities that support the individual patient and facilitate the work of health workers based in health facilities. The actions act synergistically to contribute to delaying the onset of illness following infection with HIV, slowing the progression of disease, preventing re-infection or transmission of HIV to others.

3.3.2 ART

Programme Priority: The programme priority is to enrol and retain all people eligible for ART in the treatment programme. Eligibility for ART is defined in the revised guidelines of 2013. Increased demand for ART services is anticipated as the HTC services get strengthened with the Provider Initiated Counselling and Testing (PITC). The shift from CD4 350 to CD4 500 as per the latest WHO guidelines will increase the demand for ART. Further demand will come from the PMTCT and PEP programmes.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following outcome results:

Table 6: ART Targets

Indicator 1: % of HIV-positive adults who are eligible for treatment currently receiving antiretroviral therapy				
	2013: Baseline	2014	2015	2016
Estimated population in need	626, 775	631, 291	632, 472	629, 574
% Targeted	64%	70%	80%	95%
Population Target	545,222	599, 461	685,138	808, 569
Indicator 2: % of HIV-positive children currently receiving antiretroviral				
	2013: Baseline	2014	2015	2016
Estimated population in need	151, 468	146, 726	140, 142	134, 794
% Targeted	50%	64%	77%	90%
Population Target	76, 294	93, 288	107, 615	121, 315

Priority Strategies:

- i. Scale up and sustain adherence to treatment among PLHIV;
- ii. Ensure adequate skilled health providers at all levels;
- iii. Increase the number of health facilities offering ART;
- iv. Expand ART/eMTCT services through integration;
- v. Accelerate ART access for children and adolescents;
- vi. Enhance the use of new technologies that facilitate diagnosis and clinical monitoring of treatment;
- vii. Scale up and strengthen community-based HIV testing, community level diagnostics and community level service delivery models;
- viii. Strengthen mobile ART services in rural areas and hard to reach areas or with key populations such as prisoners, migrants and the disabled;
- ix. Strengthen the food and nutrition component of the ART programme;
- x. Advocate a clear policy to fully sanction ARV prescription authority for nurses;
- xi. Scale up early infant diagnosis of HIV services to all PMTCT sites and expand routine opt-out testing in all facilities;
- xii. Strengthen monitoring systems to track linkages; and,
- xiii. Increase paediatric-focused site supportive mentorship and develop a paediatric HIV hotline for clinical support.

3.3.3 TB/HIV Co-infection

Programme Priority: For TB and HIV co-infection, the programme priority is to reduce the death rate among TB and HIV co-infected persons by providing them with treatment for both HIV and TB.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 7: TB/HIV Co-infection Targets

Indicator 3: % of co-infected patients who were screened for TB in HIV care or treatment setting				
	2013: Baseline	2014	2015	2016
Estimated population in need	778, 243	778, 017	772, 614	764, 368
% Targeted	65%	70%	80%	90%
Population Target	505, 857	544, 611	618, 091	687, 931

Priority Strategies:

- i. Strengthen mechanisms for coordination of collaborative TB/HIV interventions;
- ii. Strengthen interventions to reduce the burden of TB in HIV-infected persons;
- iii. Strengthen interventions to reduce the burden of HIV in TB patients;
- iv. Scale up TB/HIV control in special settings and populations; and,
- v. Strengthen TB/HIV infection prevention and control measures in health care and community settings.

3.3.4 HIV Testing and Counselling (HTC)

HTC is a critical entry point to both HIV prevention and treatment. It ensures a person knows their sero-status and is able to adapt their behaviour accordingly, by improving their prevention behaviour and accessing appropriate treatment if needed. In the long term, Zambia is recommending universal access to testing for HIV for adults, guided by the National HTC Operational Plan 2014-2016.

To achieve prevention and treatment results, it is essential that HTC reaches all higher risk and key populations, including patients attending health services and especially STI clients and un-well children and teens. HTC services need to achieve outreach into epidemic hot spots such as informal settlements, with services particularly strengthened in regions where HIV prevalence is highest and where most new infections are occurring, particularly among young people. Creating linkages between HTC and comprehensive youth friendly prevention and treatment services for young people is needed, with appropriate messaging and counselling tools and regional testing days including a youth focus. Reaching men and reaching couples are both challenging and important concerns. Key populations will need targeted interventions with appropriate messaging and prevention and treatment linkages.

Programme Priority: The programme priority is to address existing gaps in coverage, uptake and quality of HTC services and linkages to care, treatment and prevention services. TB screening will be included in the package of services offered in HTC settings.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 8: HTC Targets

Indicator 5: % of women and men aged 15-49 who received an HIV test and know their results				
	2013: Baseline	2014	2015	2016
Estimated population in need	6, 811, 568	7, 036, 252	7, 261, 377	7, 484, 872
% Targeted	41%	47%	50%	55%
Population Target	2, 792, 743	3, 307, 038	3, 630, 688	4, 116, 679

Priority Strategies:

- i. Scale up HTC and couple counselling services with all target audiences;
- ii. Strengthen the development of communication activities and materials relevant to specific key populations and geographically hard-to-reach populations;
- iii. Strengthen and integrate HTC and other related Health services for ease access to comprehensive service;
- iv. Strengthen the supply chain management system for HTC consumables; and,
- v. Encourage and strengthen collaboration of key players with key line Ministries on HTC service provision.

3.3.5 Elimination of Mother to Child Transmission (eMTCT)

The MOH and MCDMCH have launched new guidelines on the diagnosis of HIV, the care of People Living with HIV and the use of Anti-retroviral medicines for treating and preventing HIV infections. These include new guidelines for women, their partners and children with the objective 'of simplifying access and the delivery of this life saving service. The emphasis on initiating HIV treatment early as well as simplifying and harmonising treatment regimens among various populations and implementing new eligibility criteria will increase coverage of HIV positive women and also increase the number of children receiving HIV treatment, consequently this will reduce new transmissions of HIV, improve mothers health and reduce maternal and child health.

The national strategy is responding to findings in areas that require strengthening. In particular, support for addressing prongs 1 and 2 and also for Option B+ roll out is required. This places all HIV positive mothers on ART for life, safeguarding their health, present and future pregnancies and breastfeeding babies. It acts as long-term "treatment as prevention" with pregnancy as the entry point and will contribute significantly to keeping mothers and children alive.

Program Priority: The programme priority is to eliminate new paediatric HIV infections and improve the survival of children and their mothers within the context of HIV infection. TB screening also will be introduced as part of an integrated approach for TB and HIV control efforts in Zambia.

Program indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 9: eMTCT Targets

Indicator 6: % of HIV-positive pregnant women who receive antiretroviral to reduce the risk of mother-to-child transmission				
	2013: Baseline	2014	2015	2016
Estimated population in need	78, 095	76, 984	75, 576	73, 855
% Targeted	81%	86%	90%	95%
Population Target	63, 257	65, 950	68, 270	70, 162

Indicator 7: % of children born with HIV from mothers living with HIV				
	2013: Baseline	2014	2015	2016
Estimated population in need	11, 717	9, 820	7, 414	8, 430
% Targeted	8%	5%	2%	2%
Population Target	937	491	148	169

Priority Strategies:

- i. Reduction of new paediatric infections by 90%;
- ii. Reduction of HIV related maternal deaths by 50%;
- iii. Reduction of MTCT to less than 5% by 18 months;
- iv. Roll out lifelong ART (Option B+) to reach all eMTCT sites in the country;
- v. Scale up and strengthen male involvement in eMTCT programmes;
- vi. Scale up HIV treatment and prevention into ANC, intrapartum and postnatal care;
- vii. Strengthen HIV treatment and prevention services;
- viii. Improve and promote the use of ANC infrastructure and facilities; and,
- ix. Expand and strengthen SRHS for adolescents and women.

3.3.6 Voluntary Medical Male Circumcision (VMMC)

The NASF promotes VMMC for all Zambian males targeting men aged 15 - 49 years as part of its strategy to reduce new incidence of HIV. This strategy offers, and will continue to offer, facility-based and community-based VMMC services as part of a comprehensive HIV prevention package which includes: HIV Testing and Counselling (HTC); condom programming; screening and treatment of STIs; and, referrals for HIV positive clients.

Programme Priority: The programme priority is to scale up VMMC of males across all provinces and districts. HTC and TB screening will be offered using the VMMC settings as entry points in alignment with the integrated approach for TB and HIV control in Zambia.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 10: VMMC Targets

Indicator 8: Achieve 80% VMMC coverage among HIV negative men aged 15-49 years by 2017				
	2013: Baseline	2014	2015	2016
Estimated population in need	553,643	526,818	868,538	126,463
% Targeted	21%	29%	55%	57%
Population Target	116,265	152,777	447,696	72,084

Source: VMMC Strategic Plan

After an initial catch-up period to 2015, annual targets will drop to anticipate normal levels.

Priority Strategies:

- i) Standardise the provision of VMMC in both public and private facilities to reflect WHO guidelines;
- ii) Enhance knowledge and understanding of VMMC;
- iii) Scale up VMMC sites; and
- iv) Explore cost-effective methods of providing mobile VMMC.

3.3.7 Condom Programming

Condom promotion and distribution is one of the key intervention areas for the national HIV response as part of its commitment to reducing new infections. This intervention area will build on the successes of the current NASF 2011–2015 which promoted an increase in distribution of both male and female condoms and in the intensification of education and awareness-raising. The priority was wide-scale information sharing about the benefits of using condoms and their correct use every time a person has casual sex or has multiple concurrent sexual partners. The NASF also promoted the condom as a family planning method and for use in stable relationships among sero-discordant couples. Based on evidence and programme experience, there are significant disparities in access and condom use among sexually active age groups. The condom use has been relatively low amongst the age group 15 – 24 years and sex workers. This highlights an important challenge that requires improving condom programming to reach these population groups.

Programme Priority: The programme priority is to contribute to the prevention of new HIV infections by scaling up the demand and supply of male and female condoms and lubricants in order to increase the percentage of men and women who use condoms and lubricants consistently and correctly during sexual intercourse.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 11: Condom Programming Targets

Indicator 9: Number of condoms distributed				
	2013: Baseline	2014	2015	2016
Target (male condoms)	34,057,840	41,000,000	58,500,000	82,000,000
Target (female condoms)	168,323	1,000,000	1,500,000	2,000,000
Indicator 10: % of men aged 15 - 49 reporting the use of a condom with their sexual partner in the last 12 months				
	2013: Baseline	2014	2015	2016
Estimated population in need	1,484,992	1,527,992	1,575,208	1,622,308
% Targeted	43%	43%	43%	44%
Population Target	640,032	657,037	677,339	713,815
Indicator 11:				
<ul style="list-style-type: none"> • % of women aged 15 - 49 reporting the use of a condom with their sexual partner in the last 12 months • % of sex workers reporting use of condom with their sexual partners in the last 12 months 				
	2013: Baseline	2014	2015	2016
Estimated population in need	1,505,166	1,549,611	1,598,328	1,646,595
% Targeted	42%	42%	42%	43%
Population Target	624,644	650,837	671,298	708,036

Priority Strategies:

- i. Expand access, demand and use of condoms among the sexually active population;
- ii. Improve availability of evidence and use in condom programming;
- iii. Collaborate with Ministry of Education (MoE) on access to condoms, information, education and communication to learners; and,
- iv. Ensure consistent supply and availability of condoms to end users.

3.3.8 Social and Behaviour Change

Social and behaviour change (SBC) aims to promote sustained positive behaviours with high to low risk communities. SBC uses a variety of methods such as one-to-one talks; group discussions; community dialogues; individual and group counselling; advocacy; drama; and, mass media such as radio, television and print materials. In recent times, new technologies such as Internet, texting and social media (Facebook, Twitter) have been successfully used for SBC.

Programme Priority: The priority for the SBC programme is to influence social and behaviour change among the general and key and vulnerable populations, with the aim of changing social norms and creating demand and adherence for prevention interventions and for treatment uptake.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 12: SBC Targets

Indicator 12: % of men aged 15-24 who had sexual intercourse before age 15				
	2013: Baseline	2014	2015	2016
Estimated population in need	1,484,992	1,527,992	1,575,208	1,622,308
% Targeted	16%	16%	30%	30%
Population Target	237,599	244,479	472, 562	486, 692
Indicator 13: % of women aged 15-24 who had sexual intercourse before age 15				
	2013: Baseline	2014	2015	2016
Estimated population in need	1,505,166	1,549,611	1,598,328	1,646,595
% Targeted	14%	14%	30%	30%
Population Target	210,723	216,945	479, 498	493, 978
Indicator 14: % of men aged 15-49 who had sexual intercourse with more than one partner in the last 12 months				
	2013: Baseline	2014	2015	2016
Estimated population in need	3,382,806	3,493,412	3,604,238	3,714,631
% Targeted	20%	20%	19%	19%
Population Target	666,413	698,682	684,805	705,779
Indicator 15: Percentage of women aged 15-49 who had sexual intercourse with more than one partner in the last 12 months				
	2013: Baseline	2014	2015	2016
Estimated population in need	3,428,762	3,542,839	3,657,139	3,770,240
Percentage Targeted	2%	2%	2%	1%
Population Target	54,860	70,856	73,142	37,702

Priority Strategies:

- i. Strengthen and integrate SBC into high-impact interventions;
- ii. Scale up workplace SBC innovations;
- iii. Strengthening the development of policies and guideline documents for SBC around health seeking behaviours;
- iv. Advocate with key stakeholders for change of policies and discriminatory laws;
- v. Comprehensive sexuality education and information;
- vi. Scale up SBC in health, public and private sectors to improve low levels of comprehensive knowledge of HIV; and,
- vii. Design appropriate SBC approaches and IEC materials for key populations and vulnerable groups.

CHAPTER 4: CRITICAL HIV PROGRAMME ENABLERS

The previous chapters describe the key intervention areas which Zambia will follow over the next few years in order to reduce new infections and ensure equitable access to treatment amongst all its population, irrespective of age, gender, income level or geographical location. This chapter focuses on the environment within which these interventions are implemented and which are critical to the success of a comprehensive HIV programme. These critical enablers are activities that are essential for the effective and efficient implementation of basic programme activities and whose sole or primary objective is an HIV-specific outcome.

The social, political and cultural environment can either negatively or positively affect different members of the communities' access to and use of HIV related services. Gender inequality and stigma are still significant barriers affecting both men and women, particularly youth and key population groups such as sex workers. Critical enablers can help ensure equitable access to HIV related services, ensuring full involvement of communities to encourage a more locally led and owned and, therefore, more sustainable response that is based on local priorities. Such a system needs good governance at both national and sub-national levels that takes advantage of all local opportunities, including financial.

4.1 Gender Equality and Empowerment

The fact that HIV rates are consistently higher in women than in men demonstrates the importance of taking a strong stance to address gender inequality and gender-based violence. More women are living with HIV (16.1%) in Zambia than men (12.3%) (NAC, 2011) in the general population but the gender disparity amongst adolescents is even greater with girls in the 15 - 24 age group twice as likely to be HIV-positive than boys of the same age (UNICEF, 2011). The higher number of girls and women living with HIV is a direct result of cultural barriers which expose them to risk. Girls and women are not expected to take a lead on issues of sexual negotiations or question men's sexual behaviour outside marriage, making it difficult for them to demand condom use. In some communities intergenerational sex places girls at significant risk of exposure to the virus.

One of the most common reasons for girls dropping out of school is unwanted pregnancy or early marriage, both demonstrating unsafe sexual practices exposing young girls to the HIV virus. Men and boys are less likely to use health services including HTC meaning they are less likely than women to know their HIV status but due to unequal power relations a woman may not wish to share her sero-status with her husband for fear of being blamed.

Gender-based violence has been identified as a significant factor in gender inequality in Zambia, affecting all aspects of women and men's life including their access to and use of HIV services. In 2013, Gender Links in collaboration with the Ministry of Gender and UNICEF undertook a study into gender-based violence in selected districts in Zambia, which highlighted the breadth and depth of violence against women¹². In the study, 90% of

¹²The GBV indicators research project in Kitwe, Kasama, Mansa and Mazabuka Districts of Zambia. April 2013.

women indicated that they had been a victim of violence in their lifetime and 73% of men admitted to having perpetrated violence. These statistics were higher than any other country in Southern Africa. Whilst most violence is perpetrated by men against women, it is also clear from the report that child abuse of boys as well as girls was high. Alcohol abuse is a significant co-factor in GBV and is perceived as a serious problem by communities throughout the country.

The JMTR of the previous NASF 2011-2015 highlighted a number of important gender-related issues regarding HIV prevention and treatment. The strategy promoted: female empowerment such as girl-child education and training; community mobilisation to address negative cultural and traditional norms; legal rights training in inheritance and property ownership; and, access to credit and loans to improve women's economic independence. Two of its main achievements were integrating HIV into the National Gender Policy and Action Plan as well as the GBV Reduction Plan and the Gender in Development Programme, which improved women's income through training and access to micro-credit. As a result, access to food and nutrition improved in some households of the terminally ill. It also pointed out the need for policy makers and planners to ensure that gender is properly costed into plans so that a viable budget is available to put plans into practice. Furthermore, it noted a challenge with political will to significantly address gender disparities.

Gender inequality and GBV are both important human rights and development themes beyond HIV responses. However, they are significant barriers to the overall goal of reducing new infections and ensuring all Zambians have access to appropriate treatment. Therefore, this strategy will seek to ensure a gender dimension is included in all programme areas.

Programme Priority: The priority for this programme is to eliminate gender inequality and gender-based violence.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following outcome results:

- i. Enhanced/improved access to quality HIV continuum of care (high impact interventions); and,
- ii. Legal redress by all those who need such services, especially women, girls, adolescents, young people and other populations left behind in the response.

Priority Strategies:

- i. Advocacy on changing harmful gender and sexual norms such as early marriage, male domination of decision-making, intergenerational sex and widow inheritance;
- ii. Address socio-cultural context of sexuality, gender inequality and other barriers on access to health services by young women, girls and boys;
- iii. Strengthen coordinated government response on HIV, GBV, early marriages, unwanted pregnancies, educational advancement of girls and child protection;
- iv. Review the national plan on action to reducing HIV infection among women and girls 2010-2014; and,

- v. Update the women, girls, gender equality and HIV scorecard based on new evidence from ZDHS and evaluative research.

4.2 Laws, Legal Policies and Practices

Since the first case of HIV was diagnosed in Zambia, the Government has shown political will and commitment to invest in the response. The legal framework and practises set the tone for how Zambia will ensure a supportive environment to protect all Zambian's rights including PLHIV, women and children and other key populations. An enabling policy and legal framework ensures that an equitable and consistent approach is followed. Zambia has gone some way to creating a legal and policy environment to implement its HIV-related activities to reach all Zambians equitably. It has also enshrined the rights of its people and communities to equal access to HIV related services through its commitments to key international provisions such as the UN Convention of the Rights of the Child (CRC) and the Elimination of All Forms of Discrimination Against Women (CEDAW).

However, challenges exist which marginalise some Zambian citizens from accessing mainstream HIV services. Whilst levels of stigma around HIV have reduced, encouraging more people to come forward for testing and treatment, it is still a significant barrier to equitable access to HIV services. Young people often feel judged when visiting health services and men see many HIV-related services as heavily geared towards issues they consider female such as eMTCT. This demonstrates that whilst service access has significantly improved, implementation of strategies to increase scale-up are not necessarily being implemented evenly. Some groups of people are marginalised from mainstream services. These laws effectively exclude sex workers from easily accessing HIV services to prevent infections or to access treatment.

Programme Priority: The NASF aims at strengthening an enabling social, policy and legal environment where all people including vulnerable groups and key populations at higher risk of HIV infection have their basic human rights protected, respected and fulfilled within the context of HIV and AIDS Response.

Priority Strategies:

- i. Advocate and promote legal reform against laws and policies that hinder access to HIV services;
- ii. Support communities to harmonise their customary laws with statute law, national policies and human rights principles;
- iii. Improve key populations' access to legal support; and,
- iv. Reform national intellectual property, medicines and competition laws to incorporate existing TRIPs flexibility.

4.3 Leadership Commitment and Good Governance

Sustained political, civic, traditional, community and corporate leadership commitment at all levels, national, provincial, district and community, is essential to ensuring an effective and focused multi-sectoral response. Zambia has successfully demonstrated its political commitment to tackling HIV in a holistic manner through the development of appropriate

policies, establishing a coordination structure, which reaches from district to national levels, and working collaboratively between state and non-state actors. However, more can be done, particularly with regards to the implementation of prioritised policies and strategies. Besides, HIV needs to be more assertively mainstreamed into planning and policy development processes. The next three years will seek to strengthen community led initiatives and improve political accountability and good governance of the response.

Programme Priority: To improve and strengthen accountability and good governance of the national multi-sectoral HIV and AIDS response.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following outcome results:

- i. Enhanced political commitment and good governance;
- ii. Sustained leadership at all levels; and,
- iii. Focused investments where they matter most with sufficient quality and equity for enhanced decentralised delivery of HIV services.

Table 13: Leadership and Good Governance Targets

Indicator18a: % of functional DATFs integrated/linked into Local Authorities' Response Governance Framework			
2013 Baseline	2014	2015	2016
0	0	70%	100%
Indicator 18b: % of City and Municipal Councils whose HIV investment plans 2014-2017 have been resourced/implemented by ≥ 50 % from locally mobilised resources			
0 %	0 %	50 %	≥75

*Numerator and denominator do not apply for this indicator

Priority Strategies:

- i. Enhance leadership, governance and oversight for implementing home-grown solutions to HIV and AIDS; and,
- ii. Development of a mechanism for recognition of HIV response Champions.

4.4 Resource Mobilisation and Sustainable Financing

At the core of any national response is the mobilisation of financial resources. Zambia will advocate increasing the allocation of domestic resources to fund the NASF and encourage development partners to maintain their support for implementation of this strategic framework. The Health Fund is a sustainability measure the Government is putting in place to increase available resources for health, including for HIV. Funds from the United States Government (USG), a major partner, flow through multiple channels including PEPFAR, CDC and USAID and are managed through a Partnership Framework signed between the Government of Zambia and the USG. Additional resources will be mobilised from other partners including the Global Fund. More effort will be put into identifying local funding opportunities at sub-national level from the private sector or from within communities themselves. Mainstreaming HIV within other key social and development sectors such as health, social protection, education, infrastructure and transport is expected to share the cost of funding more evenly.

International financial assistance has declined steadily over the past several years and this situation is expected to continue, requiring the Government of Zambia to take more and more responsibility for financing the major portion of HIV interventions. A viable sustainable funding strategy, therefore, requires development and implementation. Accordingly, for the next three years, in addition to regular annual audits, value for money audits will be conducted in randomly selected institutions at each level of the national response. The information obtained from these audits will be used to strengthen the financial accountability system at all levels of the response.

Programme Priority: Ensuring availability of sufficient resources to fund the National HIV Response as articulated in the table below.

Table 14: Resource Mobilisation Targets

Indicator 19: Share of domestic financing of the HIV and AIDS response			
2012 Baseline	2014	2015	2016
USD 18 million	USD 20 million	USD 25 million	USD 30 million

**The allocation assumes there will be an increase of USD 5 million per calendar year*

Priority Strategies:

- i. Mobilise country leadership for an orderly transition to more diversified, balanced and sustainable financing models for HIV;
- ii. Improve transparency, efficiency and financial accountability of funds at all levels;
- iii. Promote public private partnerships;
- iv. Promote innovative ways to ensure sustainable financing of the HIV response; and,
- v. Promote shared responsibility and global solidarity for the HIV response.

4.5 Coordination and Management Structures – Decentralised Response

The coordination of the response is an essential aspect of delivering a cost-effective and well managed response to HIV. HIV services are delivered by multiple stakeholders in the state and civil society sectors, with the private sector playing an increasingly important role. By improving coordination and management of the response, the gaps between supply and demand for HIV services will be narrowed, duplication of efforts will be minimised, rational use of resources will be improved, and equitable distribution of resources and services will be realised. This process dictates the need to form strategic partnerships and alliances with stakeholders including civil society organisations, private sector, development partners, local authorities and communities. It is through improved coordination and monitoring that quality and comprehensiveness of services, accountability, harmonisation and alignment can be achieved.

Coordination of the national multi-sectoral response takes place at four levels: national, provincial, district and community level. Coordinating structures are multi-sectoral in nature and draw representation from Government, civil society organisation, development partners and private sector. However, there is need to address the lack of management authority of the coordination mechanisms that has hampered commitment to

coordination, particularly with regards to sharing of information and monitoring data through DATFs among various actors in the HIV and AIDS response.

Since 1993 Zambia has been committed to decentralisation as a part of its national development strategy. The Public Service Reform Programme's (PSRP) goal is "to improve the quality, delivery, efficiency and cost-effectiveness of public services. In this regard decentralisation is a tool for transferring responsibilities, authority, functions, power and appropriate resources to provincial, district and sub-district levels. The Decentralisation Policy of 2002 revised in 2013 provides for the devolution of decision-making and selective service delivery responsibilities to districts. The Decentralisation Implementation Plan 2009-2013 provides a roadmap on how this is to be achieved. In line with the SNDP and the Decentralisation Implementation Plan (DIP), the national response to HIV will be coordinated and managed through administrative structures at national and sub-national levels.

Programme Priority: To improve the efficiency and effectiveness of the national and decentralised coordinating structures of the national multi-sectoral HIV and AIDS response.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of increased efficiency of the national multi-sectoral HIV and AIDS response.

Table 15: Coordination and Management Targets

Indicator 20a: % of Local Authorities with institutionalised decentralised response coordination and management within established structures			
2013 Baseline	2014	2015	2016
0	0	70%	100%
Indicator 20b: % of Local Authorities that have integrated costed high impact HIV and related gender responses into their medium to long-term strategic (or investment) plans 2014-2017			
0	1%	15 %	≥ 50 %

*Numerator and denominator do not apply for this indicator

Priority Strategies:

- i. Strengthen the capacity of the NAC to provide effective leadership of the national response by improving the use of public, private, civil society and media networks;
- ii. Promote and ensure quality and efficient programming for higher impact;
- iii. Institutionalise decentralised response coordination and management within Local Authorities;
- iv. Enhance Civil Society self-coordinating mechanisms; and,
- v. Innovate and invest in strategic information generation and knowledge management, especially at sub-national level.

4.6 Community Systems Strengthening

Communities have been at the forefront of the response and have been critical in both raising awareness of the disease and supporting those living with HIV or affected by its consequences such as orphans and vulnerable children (OVC). Strong and resilient

communities can scale up prevention, eliminate stigma, ensure the inclusion of key populations, improve health seeking behaviours, create linkages between health service providers and communities to improve follow-up and provide household care and support for the sick and OVC.

In the R-NASF, a Community Systems Strengthening (CSS) approach will be widely implemented to promote coordinated communities and community-based organisations, groups and structures. A broad-range of community actors will be engaged to participate in HIV responses as equal partners. CSS recognises the role of key populations and communities and of community-based organisations in the design, delivery, monitoring and evaluation of services and activities. The potential of communities is enormous: demand creation, advocate for better services, stronger health literacy, provision of home-based care, support for PLHIV and orphans, challenge negative practices such as alcohol and drug abuse, and reduce stigma and discrimination. CSS will include activities such as building organisational capacity of CBOs, NGOs, networks of people living with HIV and vulnerable groups operating at community level. In addition, it will focus on community-based systems that strengthen community leadership and governance, community organisation, local resource mobilisation and management to develop community skills in advocacy, monitoring, recording and reporting and resource management. Community systems will be strengthened to ensure adequate, equitable and sustained provision of services. The process will take cognisance of the need for support to alternative sustainable livelihoods that largely depend on locally available resources.

Programme Priority: The priority for this programme is to contribute to stigma reduction and continuum of care as close as possible to PLHIV and the most affected to optimise adherence in addition to reducing loss to follow-up and maximising coverage.

Priority Strategies:

- i. Re-align HIV and AIDS community structures to legally established WDCs;
- ii. Scale up good quality sustainable community-based responses that meet the needs of key populations; and,
- iii. Establish and strengthen community evidence based programming and M&E systems.

CHAPTER 5: SYNERGIES WITH DEVELOPMENT SECTORS

The HIV epidemic has affected every aspect of development in Zambia. This chapter presents the linkages between HIV with some of the most important development sectors, highlighting the effects of HIV on that sector and articulating strategies to reduce the causes and effects of the epidemic on that sector. Within this R-NASF 2014-2016, the NAC will work with sector ministries and civil society representatives of these sectors to implement the outlined strategies to improve the overall HIV response in Zambia and ensure that HIV responses are more sustainable over time. The R-NASF represents a cost-effective and sustainable strategy of fully mainstreaming HIV into the socio-economic development of Zambia to ensure all citizens, irrespective of the age, gender or geographical location, are able to equally access relevant HIV services and support. The purpose of this section is to guide the full integration of HIV into the interventions of related sectors, providing strategies proven to reduce risk of exposure to HIV or mitigate its impact for Zambians.

5.1 Health Sector

The high impact interventions outlined in the R-NASF are services mostly delivered through the health sector, either by health service providers or through community mobilisation and CSOs. This section deals with health services either directly related to HIV such as Post-Exposure Prophylaxis (PEP), the Prevention of STIs, Blood Safety and Universal Precautions or to health sector services which are important by themselves but also have a significant relationship with HIV such as Mother and Child Health (MCH) and sexual and reproductive health (SRH), Men's health services such as prostate cancer or health related issues such as alcohol and drug abuse. Originally included in the NASF as stand-alone prevention programmes, they are recognised and included in the revised NASF as synergies with the Health Sector; the rationale for including their planning under HIV being that their neglect would lead to serious reversals of past gains made in the response.

5.1.1 Post-Exposure Prophylaxis (PEP)

The NASF supports PEP to prevent HIV infection developing in people exposed to the virus. PEP will be provided as a package of services: First aid care; Counselling and risk assessment; HTC and depending on the outcome of the risk assessment, 28 day provision of ARVs with follow-up.

The majority of incidents of occupational exposure to HIV occur in health care settings. Health workers need to be trained in PEP provision. For non-occupational PEP, the focus is to prevent HIV infection among survivors of rape and other forms of sexual abuse as well as people exposed to infected blood through traffic accidents.

Programme Priority: To ensure that PEP services are available and accessible so that all eligible people who have been accidentally or otherwise exposed to HIV are given drugs to reduce the risk of primary infection and have comprehensive knowledge of HIV.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of reduced new HIV infections from accidental exposure.

Table 16: PEP Targets

Indicator 23: % of exposed individuals provided with PEP in accordance with national guidelines in the last 12 months			
2013 Baseline	2014	2015	2016
-	-	-	100%

Priority Strategies:

- i. Integrate PEP into the minimum occupational health package for emergency workers, survivors of sexual assault, GBV and accident victims; and,
- ii. Scale up community awareness on PEP.

5.1.2 Sexually Transmitted Infections (STIs)

The control of STIs is an important strategy in HIV prevention. The most common STIs presenting in public healthcare clinics (PHCs) from 2010 to 2013 are Genital Ulcer Disease (GUD), Male Urethral Discharge Syndrome (MUDS), Vaginal Discharge Syndrome (VDS), Pelvic Inflammatory Disease (PID), Genital warts and Inguinal buboes. The greatest number of cases is from Lusaka, followed by Ndola (HMIS, 2013). STI patients are managed using the syndromic management approach in accordance with WHO recommendations. This approach is cost-effective, allowing frontline health care providers to treat the majority of STI patients without the need for laboratory-based diagnostics.

Programme Priority: To expand coverage and integration of STI services for those in need.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 17: STI Targets

Indicator 24: % of males and females and who reported an STI in the past 12 months			
2013 Baseline	2014	2015	2016
13%	10%	7%	5%

Priority Strategies:

- i. Develop a national strategy for STI, OI and TB management inclusive of HIV;
- ii. Develop a public education campaign focusing on STI and HIV infection to promote early treatment seeking behaviour; and,
- iii. Strengthen the provision of comprehensive STI services and integration into primary health care and reproductive health care.

5.1.3 Blood Safety

Blood safety is one of the most effective strategies for the prevention of transfusion transmissible infections (TTIs), including HIV, viral hepatitis and syphilis. Zambia currently screens 100% of blood in quality assured laboratories operating under the Zambian

National Blood Transfusion Service (ZNBTS). The main beneficiaries of blood transfusions in Zambia are:

- i. Pregnant mothers, with complications in pregnancy, anaemia, secondary to malaria (approx. 40%);
- ii. Children under the age of 5, suffering from anaemia, secondary to malaria, worm infestations and nutritional deficiencies (approx. 20%); and
- iii. Chronic blood deficiencies, such as sickle-cell anaemia, various types of cancer, HIV related complications; trauma cases, from accidents and violence; and, surgical cases in hospitals (approx. 40%).

The NASF supports interventions that will maintain blood screening at 100%. This will include ensuring that all the blood transfusion commodities are available, staff and clinicians are trained in blood safety and laboratory capacity for testing is maintained and increased. Education and awareness will be conducted to sensitise the public about the need for blood in order to encourage people to donate blood. Operational research will be carried out to establish a mechanism for following up on people who have been transfused to ensure that they are protected from exposure from blood that could have been in window period.

Programme Priority: To attain equity of access to safe blood and blood products throughout the country, in order to contribute to the attainment of the health MDGs, the national health and development objectives.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 18: Blood Safety Targets

Indicator 25: Number of safe blood units available for transfusion			
2013 Baseline	2014	2015	2016
113,524	130,000	140,000	150,000

Priority Strategies:

- i. Strengthen generation of strategic information and reporting on blood and products;
- ii. Strengthening referral system for blood donors who test HIV positive; and,
- iii. Undertake public awareness campaigns to mobilise blood donations from low-risk populations.

5.2 Education Sector

The HIV epidemic has had a significant effect on the education sector over the past thirty years. High sickness and mortality rates of teachers and students disrupted classes and has led to a shortage of teachers in parts of the country. The economic costs on families (early retirement of teachers) and on the state (training of replacement teachers) have been significant. However, the education sector has successfully initiated a number of policies to manage the HIV epidemic. The Ministry of Education, Science, Vocational Training and Early Education (MESVTEE) implement four broad strategies related to HIV:

- i. Management commitment to promote direction and effective implementation of HIV and AIDS programme activities;
- ii. HIV education through schools for primary and secondary students, including life skills based comprehensive sexuality education;
- iii. Teachers, support staff and pre-service students will continue to be trained in comprehensive, evidence-based SRH and HIV interactive methodologies; and
- iv. Linkages built to collaborate with other services providers related to impact mitigation and treatment and care and support of HIV and AIDS in the education sector.

The Ministry of Education, Science, Vocational Training and Early Education (MESVTEE) has committed to ensure all OVC are able to access and complete a programme of basic education (grade 1-9). Female students will be encouraged to pursue higher education (secondary and tertiary) through a quota system that allocates 30% of places to girls and strategies to improve enrolment of girls as well as retaining them in schools, especially at secondary level.

Programme Priority: To reduce the impact of HIV and AIDS on young people.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 19: Education Sector Targets

Indicator 26: % of schools implementing comprehensive sexuality education			
2013 Baseline	2014	2015	2016
1%	>80%	>90%	100%

Priority Strategies:

- i. Implement the National Policy for HIV and AIDS in the Education Sector (2014-2018);
- ii. Institutionalise linkages with the health sector to increase access to: HTC, ART and condoms for teachers, non-teaching staff and students in tertiary institutions;
- iii. Strengthen life skills education for both male and female students to include information on HIV, STIs, and risks of early teen pregnancy;
- iv. Initiate a national dialogue on condom availability in schools with youth, parents, teachers and other stakeholders;
- v. Implement a comprehensive MESVTEE HIV workplace programme for teachers and non-teaching staff; and,
- vi. Increase the resource envelope for bursaries and food supplements for orphans and vulnerable pupils and students.

5.3 Social Protection

Social protection is increasingly being accepted as a core poverty reduction strategy to reach the most vulnerable communities by helping them better cope with external shocks

that affect their livelihood security. Social protection interventions include: cash transfers; social insurance; as well as actions to reduce barriers to accessing services and legislation to reduce exclusion (UNICEF, 2011). It can contribute to the prevention of further new HIV infections by reducing potential risky coping strategies such as sex for favours or migration and it ensures those affected by the HIV epidemic such as PLHIV who are sick, some orphans or other vulnerable children and the elderly are included in schemes such as cash transfers to mitigate the impact of the epidemic on their livelihoods.

Programme Priority: To reduce the impact of HIV and AIDS on vulnerable households and individuals.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 20: OVC Support Targets

Indicator 27a: % of OVC aged 0-17 whose households received free basic external support in caring for the child			
2013 Baseline	2014	2015	2016
18 %	25 %	40 %	50 %
Indicator 27b: Current school attendance among orphans & among non-orphans aged 10-14			
2013 Baseline	2014	2015	2016
90%	93%	96%	100%

Table 21: Social Protection Targets

Indicator 28a % of informal workers/enterprises with comprehensive health insurance cover.			
2013 Baseline	2014	2015	2016
0	0	0	>20
Indicator 28b % of public social protection programmes that are HIV sensitive or have mainstreamed/integrated HIV&AIDS			
-	-	-	-

Priority Strategies:

- i. Strengthen the coordination, M&E of social protection measures to ensure the inclusion of all vulnerable groups, including those vulnerable as a result of HIV;
- ii. Ensure that appropriate legal redress mechanisms exist to improve access to social protection services free from stigma and discrimination;
- iii. Advocate for inclusive, enabling and HIV-sensitive social protection policy and regulatory environment; and,
- iv. Scale up innovative social protection delivery mechanisms that are responsive to needs of people affected and living with HIV, enhance outreach and are cost effective.

5.4 Poverty Alleviation and Livelihoods

The capacity of vulnerable households to cope with the impact of HIV will need to be strengthened further. Insufficient evidence exists to understand accurately the importance of building livelihood security in households with regards to reducing new infections and keeping HIV+ people alive for longer. However, there is evidence of small-scale initiatives

within civil society that have had some success. The key entry point will be to work with MCDMCH, local authorities and civil society organisations to empower vulnerable households with resources and skills that move them beyond welfare, material and cash hand-outs to self-reliance and resilience. Interventions such as sustainable businesses and livelihood development, improving household food security, food security packs, backyard and community gardens, small livestock schemes and reducing household risks and vulnerability are all important in the context of HIV.

There is a symbiotic relationship between the HIV epidemic and poverty and livelihood security: livelihood insecurity can lead people into risky behaviour patterns such as transactional sex or migration in search of work both putting people at risk of exposure to HIV; those living with HIV may need to reconsider their livelihood strategies such as agriculture towards less labour intensive activities; and Zambia has been left with a growing number of orphans or children affected by AIDS who are particularly vulnerable to food and livelihood insecurity. Given the generalised nature of the HIV epidemic in Zambia, building individuals and communities' capacity to progress out of poverty through reducing their vulnerabilities to external shocks and build household assets is essential. External support must take account of the capacity of PLHIV and their families through building relevant skills, improving access to credit, building appropriate value chains and markets.

Programme Priority: To contribute to poverty alleviation especially among people living and affected by HIV and AIDS.

Priority Strategies:

- i. Integration of HIV and gender into poverty alleviation and livelihood policies, strategies and interventions;
- ii. Strengthened knowledge on HIV-livelihood linkages;
- iii. Promote integration of PLHIV networks in sustainable business development and livelihood empowerment initiatives, focusing on girls, women and youth; and,
- iv. Economic empowerment of women.

5.5 Food and Nutrition Security

Under-nutrition in PLHIV can cause multiple complications, such as low Body Mass Index (BMI) which can accelerate disease progression and increased mortality (WHO 2003). Energy demands go up due to increased pressure on the immune system and untreated HIV symptoms can greatly affect one's appetite and interfere with the body's ability to absorb and utilise nutrients. This is particularly true of pregnant and lactating women. As with livelihood security, food insecurity leads to risky practises including poor feeding habits or insufficient food intake which can cause nausea and vomiting in patients on ART. Furthermore, poor nutrient absorption increases susceptibility to opportunistic infections for PLHIV (National Food & Nutrition Strategic Plan 2011-2015). The National Food and Nutrition Policy and the NFNSP will continue to guide the implementation and monitoring of the food and nutrition interventions across sectors for people living and affected by HIV.

The key strategy for the R-NASF is to increase access to and coverage of community-based nutrition interventions and integration of food and nutrition in the overall HIV management for PLWHIV, pregnant mothers, those on ART and other vulnerable groups. Advocacy for mainstreaming food and nutrition as an integral part of the comprehensive HIV management and support will be scaled up. There is also a need to improve understanding of food and nutrition by PLHIV and their families through stronger links between community systems and health centres.

Gaps and Limitations:

- i. Few nutritionists (or focal point persons) have been trained in nutrition and HIV;
- ii. Inadequate harmonisation of nutrition messages disseminated by Government and other partners;
- iii. Unclear definition of, or lack of standardisation of, food supplements and food packages distributed to PLHIV;
- iv. Inadequate integration of nutrition in HIV surveillance and national surveys;
- v. Inadequate district level planning and coordination on nutrition and HIV services and district financing; and,
- vi. Inconsistent messages on breastfeeding for HIV exposed infants due to poor implementation of national guidelines.

Programme Priority: To contribute to the reduction of food insecurity in households made vulnerable by HIV and AIDS.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 17: Food and Nutrition Security Targets

Indicator 30: % of PLHIV clinically malnourished adult PLHIV receiving nutritional support			
2013 Baseline	2014	2015	2016
50%	55%	60%	65%

Priority Strategies:

- i. Integrate nutrition assessments into high impact interventions such as ART and eMTCT;
- ii. Increase access to and coverage of high impact community-based nutrition interventions and integration of food and nutrition in the overall HIV management for PLWH, especially pregnant mothers and those on ART;
- iii. Standardise and harmonise specifications for appropriate therapeutic and supplementary foods for malnourished PLHIV in care and treatment programmes, pregnant/lactating women in eMTCT programmes and infants of HIV positive women from 6 months to 24 months;
- iv. Strengthen breastfeeding counselling messages for HIV exposed infants; and,
- v. Reinforce the importance of nutrition for treatment adherence.

5.6 Health Systems Strengthening

Zambia has committed to a continuous investment in the health sector as part of its efforts to improve access to quality health services by all its citizens (SNDP 2014-2016). The health sector has continued to record significant progress in most of the key areas of health service delivery, including the successful integration of HIV related services into other core health services such as STI treatment, family planning and maternal and child health. It has also gone through a significant restructuring process with primary health care being devolved to the Ministry of Community Development, Maternal and Child Health. The sector, however, continues to face major challenges including:

- i. Inadequate numbers of medical staff particularly in more remote rural areas which leads to severe congestion problems in health centres;
- ii. Weak logistics management of drugs and medical supplies including HIV related equipment and supplies such as condoms;
- iii. Inadequate and inequitable distribution of health infrastructure in the country;
- iv. Lack of equipment leading to long delays in access to test results; and
- v. Lack of electricity and internet connectivity possess a huge challenge in improving the quality of services especially to rural areas.

Programme Priority: To improve equitable distribution, availability and accessibility of quality and comprehensive HIV and AIDS services in ways that are gender and human rights responsive and cost effective.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 18: Health Systems Strengthening Targets

Indicator 31: % of priority health policies, regulations, strategies and programmes (e.g. SHI, MCH, SRH, NCDs, GOC, ANC, STI, malaria etc.) integrating HIV			
2013 Baseline	2014	2015	2016
No data	No data	No data	No data

* *Numerator and denominator do not apply for this indicator*

Priority Strategies:

- i. Streamline the national HIV response architecture informed by realigned functions between the MoH and MCDMCH to take into account procurement and supply chain management systems, human resource management, information management systems, Laboratory services and other vital health systems;
- ii. Scaling up the integration of HIV services with critical health programmes i.e. non-communicable diseases (NCDs), STIs, MCH, sexual and reproductive health;
- iii. Development of mother’s waiting houses;
- iv. Finalise the interface of biomedical and non-biomedical response data management platforms (i.e. HMIS and NACMIS);
- v. Scale up innovative community-based (e-health) delivery modalities (e.g. project Mwana, end AIDS portal, Tendai, e-vouchers for non-cash safety nets, support groups etc.);

- vi. Generate strategic information and advocate for sustainable domestic financing for health and efficient usage of mobilised resources; and,
- vii. Develop technical and operational capabilities¹³ for efficient management of complementary external resources (i.e. GFTAM) earmarked for public health response as per transitional plan.

5.7 HIV and AIDS in the Workplace

HIV has devastating impacts on the labour force and consequently on socio-economic development due to lessened productivity. Labour intensive sectors such as agriculture, mining, construction, transport, the military and uniformed services are the most affected sectors in the country (UNAIDS, 2009), due to the combination of high numbers of migrants away from families and higher rates of disposable incomes. This has a parallel negative effect on the host community which may benefit from the larger numbers of labourers in their community but who attract a sex trade which filters through to the whole community. Whilst some sectors have made good progress in scaling up access to the full range of HIV services to its personnel, HIV rates are particularly high within these groups. This link between mobility, HIV prevalence and high-risk behaviour has been well documented (ZDHS, 2007).

Although the HIV pandemic is increasingly being addressed at the workplace, it is yet to be fully institutionalised. The JMTR 2013 noted that the number of organisations with HIV workplace policies had increased from 560 in 2010 to reach 1, 187 by 2012 but it was not clear how many people this had reached, nor whether it provided full access to the range of HIV high impact interventions. Furthermore, most organisations developed their own internal policies without guidance by a national overarching HIV and AIDS and Wellness Workplace Policy.

The R-NASF will ensure that mainstreaming of HIV and AIDS into workplaces is guided by a national policy and expanded to reach workforces in the public and private sectors. Labour intensive sectors such as mines, agriculture, heavy construction and the road sector will be prioritised. The informal sector that promotes mobility such as cross-border trading markets, fishing areas, border towns and surrounding or host communities will also be deliberately targeted with comprehensive HIV and AIDS information and mobile healthcare services such as HTC, STI, eMTCT, VMMC, TB and ART.

Programme Priority: To contribute towards members of the formal workforce having access to a comprehensive package of HIV high impact interventions.

¹³i.e. governance, programme and financial management systems, procurement and supply chain, implementation support, M&E systems

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of the following results:

Table 19: HIV and AIDS in the Workplace Targets

Indicator 32a: % of public sectors implementing annual plans that have mainstreamed HIV and AIDS with a gender and human rights sensitive lens			
2013 Baseline	2014	2015	2016
100%	100%	100%	100%
Indicator 32b: % of public sectors (or institutions) implementing minimum package of HIV workplace/wellness programmes aligned to public sector workplace policies and strategy			
0	0	0	>25%
Indicator 32 c: # of public sectors/institutions that have mainstreamed HIV and related gender and human rights issues into their strategic plans aligned to national HIV, health polices			
100%	100%	100%	100%
Indicator 32 d: # of public sector employees (male and female) who have utilized HIV&AIDS related services at the workplace in the last 12 months			
46%	63%	70%	>85%
Indicator 32 e: % of public sector employees (male and female) who correctly identify the gender and human rights-based HIV&AIDS risks at the workplace			
-	-	-	-

Priority Strategies:

- i. Finalise and implement the national HIV and AIDS Wellness Workplace Policy and Public Sector Response Strategy;
- ii. Routine monitoring and provision of positive incentives (i.e. annual awards, recognition of champions) for innovative programming, implementation capacity and outcomes of HIV and AIDS Wellness –policies and programmes for all work places, both formal and informal;
- iii. Generate strategic information products that highlight investment choices and efficient use of resources earmarked for HIV and related gender response in the public sector; and,
- iv. Research how best to reach vulnerable groups such as fishermen and the informal sector.

5.8 Mainstreaming HIV into Capital Projects

The government is committed to large-scale infrastructure projects as part of its plans to improve socio-economic growth for the country. It also recognises that without careful planning, such projects can fuel the HIV epidemic. National infrastructure projects such as the Link Zambia 8,000; construction of 2,000 kilometres of township roads using labour-intensive paving blocks and cobblestone technology in Lusaka; and other infrastructure development projects both in the public and private sector are contributing to unprecedented labour migration around the country. Whilst they provide economic opportunities for migrants and businesses and improve communication and movement of goods and people, they can also increase risk of exposure to HIV through unprotected sex thus fuelling the spread of HIV and AIDS and can substantially alter the pattern of

prevalence if not well mitigated (JMTR, 2013). Transportation of goods of which about 80% is done by road, also contributes to frequent movement of people especially truck drivers (TWG transport, 2014). Consequently HIV and AIDS is concentrated along the line of rail, major truck routes, border towns, construction camp sites and transit towns such as Chirundu, Livingstone, Kapiri Mposhi, Chipata and Nakonde. There has also been an influx of migrant workers in Solwezi, the provincial capital of North-western province. Until 2001, Solwezi was an isolated and sparsely populated town but has since witnessed the influx of migrant workers from within Zambia, the region and overseas, leading to rapid population increase against limited social services such as housing and other amenities (IOM, 2010).

The Ministry of Transport, Works, Supply and Communications (MTWSC) is implementing a number of HIV and AIDS interventions to address adverse effect on mobile populations in the transport and construction sector. HIV and AIDS activities are being coordinated by the Technical Working Group which consists of National Drivers Association, Truck Drivers of Zambia, Cross-Border Traders Association, ILO, NAC and other stakeholders. The major challenge the Ministry is facing is lack of coordination between the construction and the transport sector and that the HIV and AIDS programmes consist of the traditional activities of prevention such as condom distribution and HTC. The impact of these activities has not yet been assessed (MTWSC internal report, 2013).

The R-NASF will seek to implement a two-pronged strategy to address the potential adverse effects of mobile populations involved in large infrastructure development projects and truck drivers. These interventions will also take into account the local populations such as women and girls who may engage in risky activities exchanging sex for material gain. Interventions will be implemented in order to reduce HIV risks especially for vulnerable populations such as women, girls and boys. R-NASF proposes the development and strengthening of strategic partnerships between relevant institutions in order to mitigate health, social and developmental impacts associated with large scale infrastructure development projects.

Programme Priority: To strengthen the capacity of the various sectors to evaluate, understand and respond to the critical HIV risk factors to the organisation and at the same time address cause and consequences of their work in fuelling the spread of AIDS.

Programme indicators and targets: Effective implementation of the programme priorities is expected to contribute to the achievement of mitigating the impact of mega capital projects on the spread of HIV.

Table 20: Mainstreaming HIV into Capital Projects Targets

Indicator 33: % of major capital projects that have mainstreamed HIV, related gender and human rights in the planning and implementation phases of the project			
2013 Baseline	2014	2015	2016
≤25 %	50 %	65 %	80 %

Priority Strategies:

- i. Integrate HIV, related gender and human rights aspects into capital projects eligible for Environmental Assessments;

- ii. Affirm institutional mechanism for implementation of Environmental Management Plans (EMPs) and coordinated HIV response at all levels during all phases of mega capital projects across sectors;
- iii. Promote south to south and cross border cooperation on integration of HIV, related gender and human rights aspects in joint regional development initiatives; and,
- iv. Develop an effective and efficient tracking system on utilisation of funds allocated to HIV and AIDS mitigation for higher impact interventions during all phases of mega capital projects.

CHAPTER 6: RESPONSE COORDINATION AND MANAGEMENT

6.1 Coordination and Management

Coordination of the response is an essential aspect of delivering a cost-effective and well managed response to HIV. HIV services are delivered by multiple stakeholders in the state and civil society sectors, with the private sector playing an increasingly important role. By improving coordination and management of the response, the gaps between supply and demand for HIV services will be narrowed, duplication of efforts will be minimised, rational use of resources will be improved, and equitable distribution of resources and services will be realised. This process dictates the need to form strategic partnerships and alliances with stakeholders including civil society organisations, private sector, development partners, local authorities and communities. It is through improved coordination and monitoring that quality and comprehensiveness of services, accountability, harmonisation and alignment can be achieved. Coordination of the national multi-sectoral response takes place at four levels: national, provincial, district and community level. Coordinating structures are multi-sectoral in nature and draw representation from Government, civil society organisations, development partners and private sector.

One of the greatest challenges to improved coordination of the national response has been the lack of management authority of the coordination mechanisms. Membership of the various structures mandated to coordinate the national response is voluntary, with each member reporting through to its own organisation. As a result, commitment to coordination has often been weak. This has been particularly true with regards to sharing of information and monitoring data with neither state nor non-state actors systematically reporting through to DATFs, weakening the quality and reliability of the NAC MIS.

The National HIV/AIDS/STI/TB Council will, within its mandate as prescribed under the Act No. 10 of 2002 which established the Council undertake to provide the necessary leadership in the coordination and management of the National HIV Response. Accordingly, NAC shall endeavour to advocate for the review of its mandate for increased authority over the coordination and management of the National HIV Response. Figures 8 and 9 demonstrate the institutional arrangements for the coordination of the national response, both at the national and sub national level.

6.2 Costing and Financing of the R NASF

The HIV and AIDS response in Zambia is heavily dependent on external aid. However, the Government contribution to the health sector from its own resources has increased in recent years from 8.7% in 2010 to 11.3% in 2013. One of the key options for increasing the finances available to the health sector through sustainable means has been identified as the establishment of the National Health Insurance Scheme. The National Health Insurance Scheme shall, among other functions, supplement the normal funding mechanism to the health sector in general and the National HIV Response in particular. This will, therefore, increase sustainable funding to the sector which is a necessary step towards achieving universal health coverage and provision of access to quality health care. Other options for

increasing financing for health include the road sector support through the Environmental Impact Assessment.

The Government provides 5-8% of the project funds for all road and large capital projects towards environmental impact assessments, mitigation for HIV and gender mainstreaming, using the Environmental Impact Assessment (EIA) processes. Examples of these projects include: the Link Zambia 8000 Roads Development Project, the Pave Zambia 2000 and township roads, built through the Local Government and the Constituency Development Funds. The rural electrification projects under the Rural Electrification Authority (REA), the mines and other businesses in the private sector also provide similar funds for HIV and AIDS services for their workers and the surrounding communities in their project areas. Some of these funds go towards providing services for contract workers on these projects (internal mainstreaming) and some of the funds go towards financing the overall HIV and AIDS response in communities in the surrounding areas of the project vicinity. These services include health education and promotion, demand creation of all high-impact programmes and response coordination and management.

The R-NASF has been costed at a macro level using a Resource Needs Estimate. The total funding requirement for the Response for the three year period is estimated at US\$1, 650, 926, 488, with available funding totalling US\$1, 387, 081, 168 and an overall funding gap of US\$263, 845, 320. The table below depicts R-NASF funding for 2014 - 2016.

Table 21: Resource Requirement for the implementation of the R-NASF 2014-2016

	USD			
	2014	2015	2016	Total
Core Programmes				
ART	198,507,824	214,966,940	230,084,760	643,559,524
HIV Testing & Counselling	72,084,013	79,138,661	89,731,885	240,954,559
Elimination of Mother to Child Transmission	39,858,689	41,529,197	42,816,732	124,204,618
VMMC	49,145,791	81,930,907	21,402,662	152,479,360
Condoms	25,625,000	36,562,500	51,250,000	113,437,500
Behaviour and Social Change	1,713,372	1,717,434	1,721,606	5,152,412
Total Basic Programmes	386,934,689	455,845,639	437,007,645	1,279,787,973
Social & Programme Enablers				
Community Systems Strengthening	38,693,469	45,584,564	43,700,764	127,978,797
Coordination & Management Structures	29,020,102	34,188,423	32,775,573	95,984,098
Resource Mobilization & Sustainable Financing	5,804,020	6,837,685	6,555,115	19,196,820
Gender Equality & Gender-based	5,804,020	6,837,685	6,555,115	19,196,820

Violence				
Legal & Policy	5,804,020	6,837,685	6,555,115	19,196,820
Political Commitment & Advocacy	5,804,020	6,837,685	6,555,115	19,196,820
Health Systems Strengthening	5,804,020	6,837,685	6,555,115	19,196,820
M&E	15,477,388	18,233,826	17,480,306	51,191,520

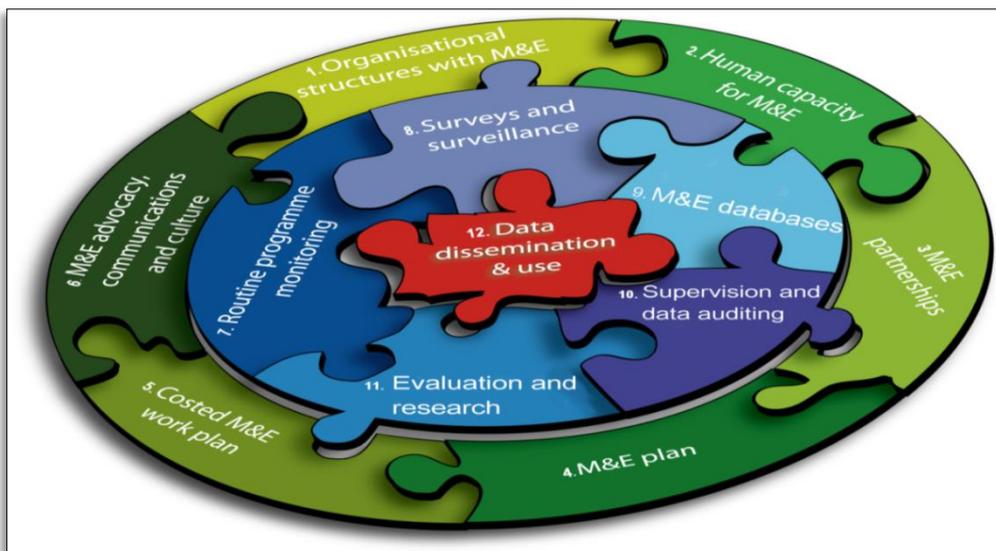
M&E	15,477,388	18,233,826	17,480,306	51,191,520
Total Enablers	112,211,059	132,195,238	126,732,218	371,138,515
Total	499,145,748	588,040,877	563,739,863	1,650,926,488

6.3 Monitoring and Evaluation

This is a framework for monitoring and evaluating the implementation of the revised National AIDS Strategic Framework 2014-2016. The framework takes into account existing monitoring and evaluation sub-systems being implemented by different stakeholders, as well as planning and monitoring frameworks and policies in Government. Accordingly, the framework describes key M&E questions to be addressed, indicators, baselines and targets, data sources and frequency of reporting. The core national indicators in Annex 1 are aligned with key international and regional declarations and commitments to which Zambia is a signatory.

The M&E framework will be guided and operationalised by the 12 components for a functional M&E system. The 12 components of the M&E system are clustered into the three main groups namely; people, partnership and planning; data management and data use.

Figure 12: Components of an HIV/AIDS M & E System

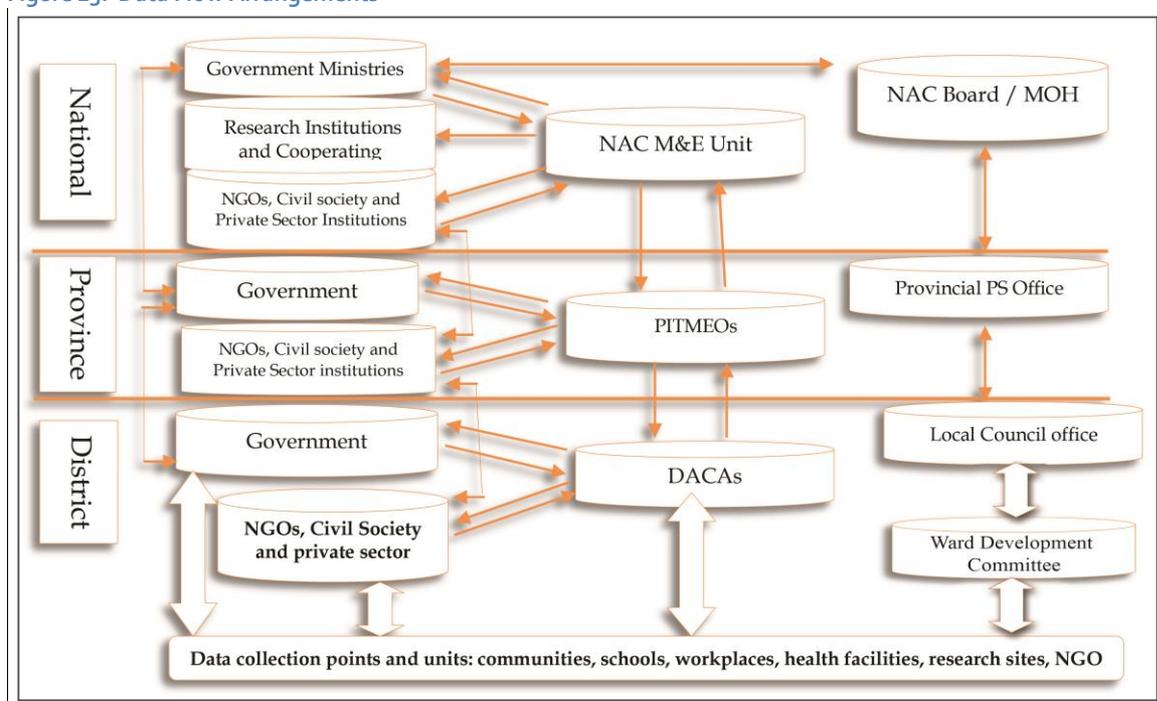


Source: UNAIDS (2007)

People, Partnerships and Planning: This cluster consists of the critical components required to create an enabling environment for HIV M&E. This includes organisational and human resources, partnerships and planning needed to support data collection and data use. During the implementation timeframe of the R-NASF, the primary focus shall be placed on development of institutional and human resource capacity for M&E. In the short and medium term shortfalls in M&E expertise shall be addressed through strategic partnerships through strengthening of the multi-sectoral M&E technical working group.

Data management: The primary responsibility of generating and managing programmatic data lies with the relevant sectors. Only data that will assist in compiling of the agreed core set of indicators shall be reported to the NAC, Provincial Information Technology Monitoring and Evaluation Officer (PITMEO) and the DACA. Information products shall be shared with relevant stakeholders using both existing and emerging platforms.

Figure 13: Data Flow Arrangements



Reporting: At national, provincial and district levels reporting on the core set of indicators shall be done through standardised reporting tools. Data flow will be guided by the figure below. Data use at the level of collection will be emphasised and promoted. All data submitted to the next level shall be quality assured and signed off by designated officers to certify that the data are accurate.

6.3.1 Objectives of the Framework

The overall objective of the M&E framework is to guide the monitoring and evaluation of the implementation of the R-NASF 2014-2016. Specific objectives of the framework include:

- i. Monitoring the dynamics of the HIV epidemic – HIV incidence, prevalence and mortality;

- ii. Informing development of HIV Sub-national M&E frameworks for monitoring implementation of HIV interventions at that level;
- iii. Guiding the evaluation agenda for the R-NASF;
- iv. Influencing harmonisation of indicators and data reporting tools; and,
- v. Supporting mobilisation of resources (financial and others) for implementation of the R NASF and the one M&E system.

6.3.2 M&E Coordination

Monitoring and evaluation of the multi-sectoral response will require greater coordination of all players in the national HIV response in order to allow for optimal utilisation of available resources, sharing of experiences and foster evidence based reporting aligned to the provisions of the R-NASF. The National HIV/AIDS/STI/TB Council through the Policy and Planning Directorate will be responsible for the overall monitoring of the national multi-sectoral response. At the highest level the M&E system for the national response will be monitored using multiple data sets from multiple data systems within the broader Health Information System (HIS) held by the Ministry of Health and NAC. These data sets converge where it is intended and are used to generate information products that support strengthening the national response. Most of the programme specific data pertinent to monitoring the national response – including ART, eMTCT, VMMC and HTC data - flows from facility level, through district and regional health offices, to national level. Data collection and analysis will continue to be undertaken using the following tools:

- (i) **NACMIS and E-Mapping System:** E-Mapping (www.zambianacmisonline.org) is an online stakeholder management and activity reporting system, which helps NAC and its partners to understand a number of M & E information details. The development of the E-mapping system has been supported throughout by NAC, the United Nations Joint Team, the World Bank, CDC and Volunteer Services Overseas (VSO). The system also includes an online National AIDS Reporting Form (NARF) tool that automatically generates graphs which compare the NARF data (at district, provincial and national levels) against the Millennium Development Goals (MDG) for Zambia.
- (ii) **The Zambia Demographic and Health Survey (ZDHS):** This is a robust instrument for tracking changes in knowledge and behaviours at a national level. It is conducted every five years, with the last having been conducted in 2007. At the time of reporting, the ZDHS was underway and was hoped to be completed in 2014.
- (iii) **Health Management Information System (HMIS):** This is the largest and most important M&E tool in Zambia. It provides for all clinical health related data on all diseases including HIV and AIDS. This tool has in the recent past been undergoing some upgrading to conform to latest developments in data capture and indicator tracking.

- (iv) **National AIDS Council Activity Report System:** This refers to a generation of information from standard forms received by NAC on a regular basis from sub-national structures, including PATFs, DATFs and Government line ministries implementing HIV and AIDS interventions. The relevance of the form arises out of the fact that it summarises the coverage achieved by organisations implementing HIV and AIDS interventions in the areas of prevention, care and support, M&E, impact mitigation and coordination and management. These forms, which are generic data reporting forms for HIV and AIDS activities, are collated at district, provincial and national levels on a quarterly basis.
- (v) **Cohort Studies:** Cohort studies are conducted for various purposes to monitor a group of individuals with similar characteristics to monitor the effectiveness of a service delivery programme or behaviours that may occur to a particular group of individuals when exposed to a specific event or situation.
- (vi) **Education Management Information Systems (EMIS):** The EMIS system collects HIV and AIDS information. The primary output is the percentage/proportion of teachers who have been trained in life skills education and who taught it during the previous academic year.
- (vii) **National Commitments and Policy Instrument (NCPI):** The NCPI covers four broad areas of policy, strategic planning, prevention, human rights, and care and support. A separate index is calculated for each policy area using specific policy indicators and calculating the overall percentage score. The relevance of this tool is in the computation of the National Composite Policy Index covering gender, workplace stigma and discrimination, human rights, CSO involvement, prevention, TCS, integration, mitigation services and M&E.
- (viii) **Sentinel Surveillance Surveys:** Biological surveillance of HIV has been primarily tracked through surveillance of sentinel populations. Surveillance data is collected from a sample of urban, rural and transitional rural sentinel sites in the country distributed throughout the provinces. Specified minimum samples for each type of site are set in advance and vary from year to year. Blood samples are drawn and testing for syphilis is done on site while the rest of the samples are sent to the University Teaching Hospital and the Tropical Diseases Research Centre (TDRC) for HIV testing. These surveys are relevant because they help in the determination of the incidence and prevalence of syphilis in women of reproductive age group in sentinel populations.
- (ix) **Financial Expenditure Tracking:** Financial surveys are useful for showing how efficiently and effectively HIV and AIDS funds are utilised to achieve set national targets.
- (x) **Workplace Surveys:** These surveys provide information on the extent to which workplaces develop policies to protect and mitigate the impact of HIV and AIDS on their respective employees. These surveys, which are relevant and critically

important for the preservation of people's human rights, are conducted on an annual basis.

- (xi) **Zambia Health Facility Survey (ZHFS):** The ZHFS is conducted to better understand provider/household linkages, provider performance, costs, quality and effectiveness, links between providers, and Government-provider linkages, where the relevance lies.
- (xii) **Zambia Sexual Behavioural Survey (ZSBS):** The ZSBS is carried out to monitor the extent to which the programmes to prevent HIV are successful.
- (xiii) **Quarterly SARF Report:** NAC produces the Quarterly SARF Report to provide information on coverage statistics per HIV programme area. The production of this report also ensures that NAC meets the Global Fund to Fight Tuberculosis, AIDS and Malaria (GFTAM) requirements in terms of minimum reporting standards and reports to its other basket donors.
- (xiv) **Biennial GARPR Report:** The Biennial GARPR Report is prepared to report on 17 specific indicators in a manner defined in the UNAIDS Guidelines for the Construction of Core Indicators. The report is one fulfilment of Zambia's signatory status to the 2001 Declaration of Commitment on HIV and AIDS at the United Nations Special Assembly Session on HIV and AIDS (UNGASS).
- (xv) **The Joint Annual Review Process (JAPR):** The JAPRs bring the Government of the Republic of Zambia, NAC, and its partners together to review, on a regular basis, the performance of the national HIV response. The last review was conducted in 2013.
- (xvi) **SPECTRUM:** SPECTRUM is a suite of easy to use policy models which provide policymakers with an analytical tool to support the decision making process. Spectrum as a software has seven sub-components - DemProj, FamPlan, Project Child Survival, AIDS Impact Model, Costs Implementing and HIV/AIDS programme, Resources for the Awareness of Population Impacts on Development and the Safe Motherhood Model. The Spectrum tool is relevant in the determination of the indicators with respect to determining the number of new infections annually.

6.3.3 Indicators, Targets and Baseline Values

The Joint Mid Term Review of the 2011-2015 NASF highlighted challenges in the measurement of a number of indicators on account of clarity and lack of baseline values. To address this challenge, the Policy and Planning Directorate will lead a process of further clarifying and harmonising indicators, target setting at the national and sub national level accompanied by agreed baseline values for selected core indicators.

6.3.4 M&E Information Products

The NAC Policy and Planning Directorate through the Monitoring and Evaluation Officer, PITMEOs and District M&E focal points shall contribute to production of audience-specific information products for the national response. Among others, these information products shall include: Annual reports; Half-year reports; Global AIDS Response Progress Reports (GARPR) ; KYE/KYR; NASA; Behavioural survey reports; ANC surveillance reports; Pharma-covigilance surveillance reports; Joint annual review reports; End of NASF review reports.

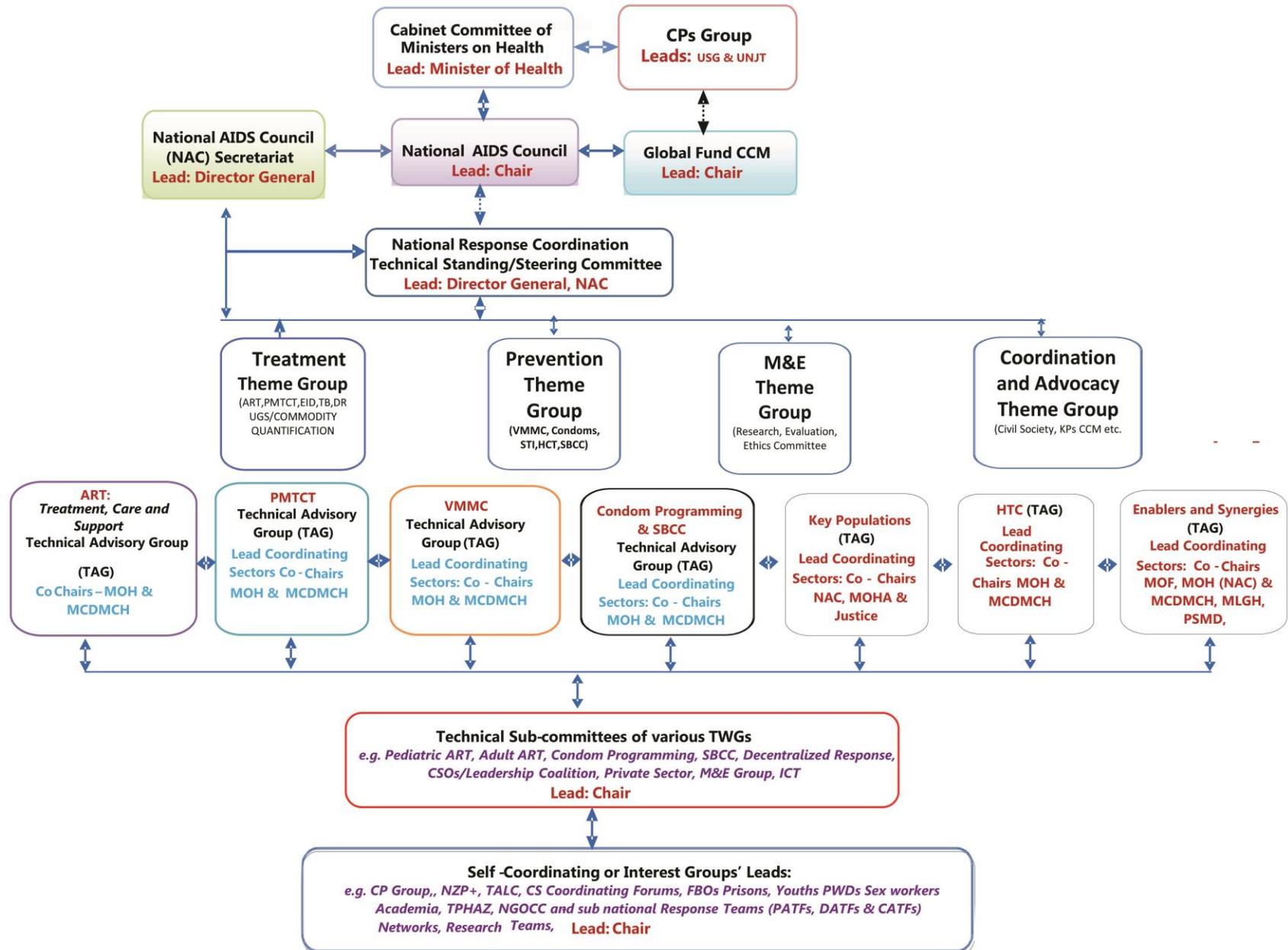
The key surveys and surveillance systems that will provide data for monitoring the NASF implementation include:

- i. The annual HIV prevalence survey among pregnant women;
- ii. Behavioural and HIV prevalence surveys among key populations (e.g. prisoners, fisher folk, sex workers, mine workers, etc.);
- iii. Zambia Demographic and Health Survey;
- iv. Behaviour Surveillance Survey;
- v. Drug resistance and adverse drug reaction surveillance;
- vi. KYE and KYR; and,
- vii. HIV prevalence survey among TB patients.

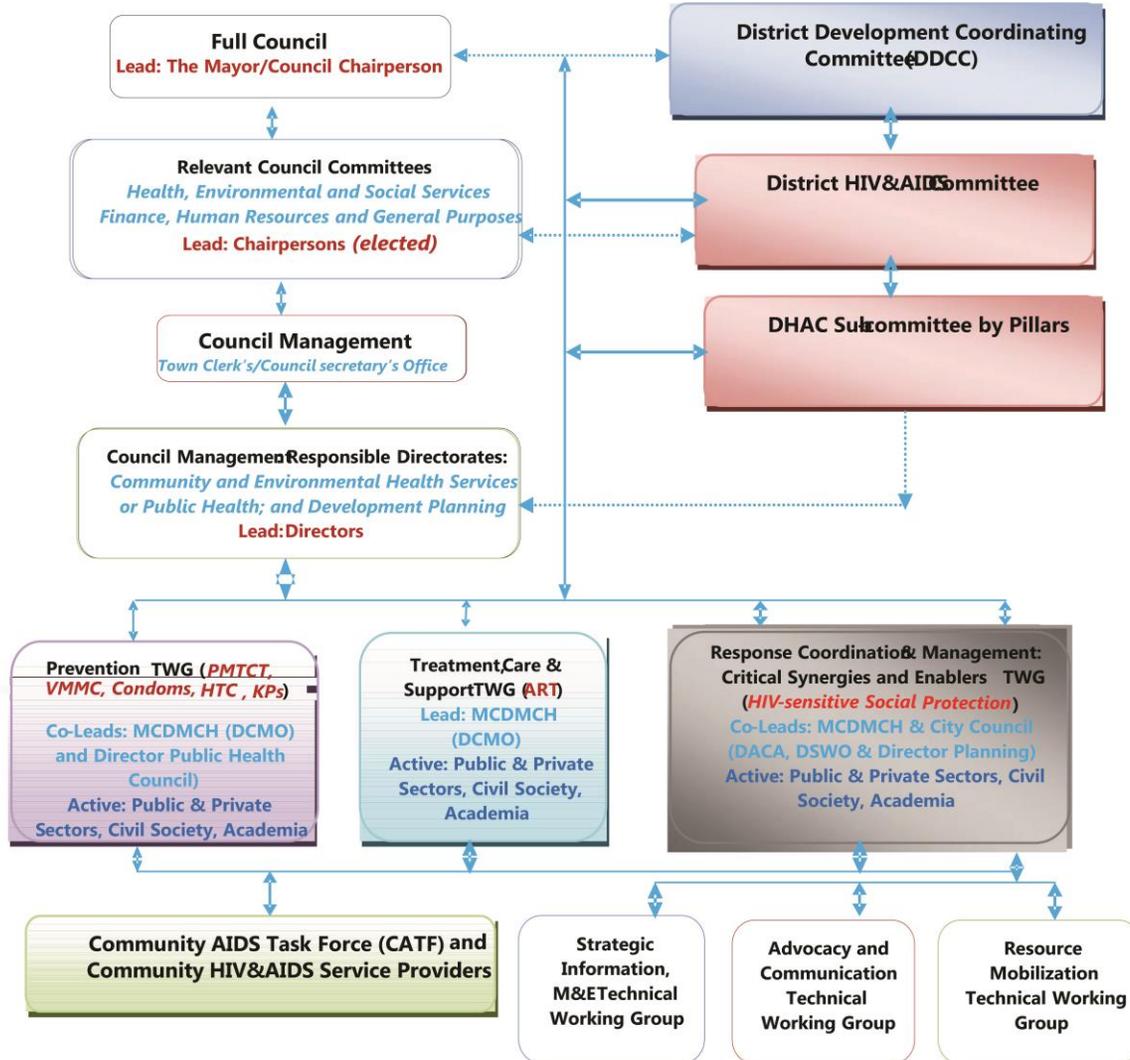
6.3.5 Evaluation Agenda

The NAC shall lead a consultative process to develop an evaluation agenda for the R-NASF, mobilise resources and facilitate its implementation. The basis for the evaluation will be the indicators, targets and baseline values presented in the M&E Matrix below.

Annex 1: Response Coordination and Management Framework at National to Provincial Level



Annex 2: Reponses Coordination and Management Framework at Sub-National Level – District to Ward



Annex 3: NASF Core Indicators and Targets

A. Impact Indicator

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values	Data Source	Frequency	Disaggregation
					2013	2016			
1	HIV prevalence among women and men aged 15-24	Proxy for HIV incidence	Number of men and women testing HIV positive	Total number of men and women tested	F: 8.5% M: 6.5% (DHS 2007)	F: 7.5% M: 5.5	Household surveys		Province, Sex, Age, SES, Location/Setting
2	HIV prevalence in key populations	Monitor levels of infection in these groups over time	Number of key populations testing HIV positive	Total number of people (key populations) tested	i.e. 27.4% prison inmates (SBSS 2011)	24.4%	Special surveys	Periodic	Sex, age, Setting
3	HIV Incidence	Actual number of new HIV infections in the population	Number of new infections arising in a defined population	Total number of people in that population	0.79% (2013)	0.40% (2016)	Spectrum Estimates	Periodic	Province, Sex, Age
4	TB Prevalence	The actual number of TB cases at a given point in time (reported as number per 100,000 population)	Number of people with TB disease at a given point in time	Total population at the same given point in time	314/100,000 (2013)	338/100,000 (2016)	TB Prevalence Survey Report	Every 5 years	Province, Age, Sex, HIV status
5	TB Incidence	Estimated TB disease burden over a period of time (reported per 100,000 population)	Total number of all people with TB disease that occur in a given period	Total population	427/100,000 (WHO 2013 Report)	TBD	Spectrum Modelling Estimates	Annually	Province, HIV status
6	HIV prevalence among TB patients	The degree of overlap between the TB and HIV epidemics compared to the prevalence of HIV in the general population,	Number of all TB patients registered over a given period of time who are HIV positive	Total number of TB patients registered over the same given time period	54% (WHO Report 2013)	50%	TB Survey	Every 2 years	Province, Sex, Age
7	Percentage of all mortality due to HIV and TB	Success of HIV and TB programmes	Adult mortality attributable to HIV and TB	Total adult mortality from all causes	9% (2010)	5% (2016)	Spectrum Modelling Estimates	Annually	Sex, Age –
8	% expressing accepting attitudes towards PLHIV	Levels of HIV and TB stigma and discrimination	People expressing accepting attitudes towards PLHIV	Total people surveyed	34% (BSS 2009)	40%	Stigma Index Survey BSS	Every 2 years	Province
9	Domestic and international HIV and TB spending	Commitment and absorptive capacity	N/A	N/A	283 million NASA (2013)	TBD	NASA	Every 2 years	National, provincial

B. Programme Outcome Indicators

ART Indicators

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
10	Percentage of people initiated ART who are alive and on treatment at 12, 24, 36 and 60 months	Treatment coverage and retention	People on ART who are alive	Total number of people initiated on ART	64% Adults 50% Children at 12 months (2013)	70% 60%	80% 77%	95% Adults 95% Children	Cohort Analysis ART Registers	Annual	Province, Sex, Age
11	% eligible who receive ART	Coverage of the ART programme	Number of people receiving ART according to national guidelines	Estimated number of people in need of ART	64%	70%	80%	95%	Numerator from HMIS and denominator from Spectrum Modelling	Quarterly	Age, gender, province,
12	Percentage of co-infected TB patients initiated on ART	ART coverage for TB patients	Number of co-infected TB patients started on ART over a given period	Total number of TB patients who tested HIV positive over the same given period	40%	50%	60%	80%	NTP Reports	Annually	Age, sex, province

PMTCT Indicators

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
13	Infants born to HIV-positive mothers who are HIV-positive at 6 weeks, 12 months 18 months post-partum	Success of PMTCT programme, by determining the percentage of babies born HIV positive	Number of babies born to HIV-positive women who are HIV positive	Total number of live births to HIV-positive women	8%	5%	2%	2%	HMIS	Quarterly	Province

Condoms Indicators

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
14	Male and female condom distribution	Reach of condom distribution programme	Number of male and female condoms distributed	N/A	M:7.6m F:168,323 (2013)	M:4.1m F: 1m	M:5.8m F:1.5m	M:8.2m F:2m (2016)	HMIS MLS	Quarterly	Province, Private/ Public sectors
15	% men and women aged 15-24 reporting the use of a condom with their sexual partner at last sex	Success of prevention programmes in achieving a high number of protected sex acts	Number of young women and men reporting condom use at last sex	Total number of young women and men surveyed	F: 41.5% M: 43.1% (ZDHS 2007)	F: 60% M: 60%	F: 65% M: 65%	F: 75% M: 75%	DHS	Every 4 years	Province, Gender, Age

VMMC Indicators

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
16	Number of sexually active males (15-49) medically circumcised	Reach of male circumcision programme	Number of sexually active males medically circumcised	Sexually active HIV negative males	21% 270,528 (2013)	29% 526,816	55 868,538	57% 126,463 (2016)	HMIS VMMC Programme	Quarterly	Province, Age

HTC Indicators

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
17	Number and percentage of men and women 15-49 counselled and tested for HIV	Reach of the HTC programme	Number of people who have been tested for HIV	Total number of people in the population	41% 3.0 million (2013)	47% 3.3 million	50% 3.6 million	55% 4.3 million (2016)	HMIS HTC Reports	Quarterly	Province, Gender, Age
18	Percentage of TB patients tested for HIV	Uptake of HIV testing by TB patients	Number of TB patients with unknown or previously negative HIV status over a given period, who are tested for HIV	Total number of TB patients with unknown or previously negative HIV status registered over the same given period	87%	90%	95%	100%	NTP Reports	Annually	Age, Sex, province

BCC Indicator

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
19	% young women and men aged 15-24 who had sexual intercourse before age 15 (age at sexual debut)	Preventing young people in engaging in sexual activities	Number of young women and men reporting their sexual act below the age of 15	Total number of young women and men surveyed	F: 14% M: 16% (DHS 2007)	F:14% M: 16%	13% 15%	13% 15%	ZDHS	Every 4 years	Province, Gender, Age
20	% women and men aged 15-49 years who have had sexual intercourse with more than 1 partner in the last 12 months	Measure of multiple sexual partners	Number of women and men reporting more than 1 sexual partner in the last 12 months	Total number of women and men surveyed	F: 2% M: 20% (DHS 2007)	F: 2% M:20%	F: 2% M:19%	F: 1% M: 19%	DHS or other surveys	Every 4 years	Province, Gender, Age
21	Number of people reached by HIV prevention communication messages at least twice a year	Reach of communication programmes	Number of people who recall being reached by 2 or more communication messages about HIV prevention	Total population	30% (2009)	70%	80%	90%	BSS	Every 4 years	Age, gender, location

TB Indicators

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
22	Percentage of people screened for TB	Population coverage of TB screening	Number of people screened for TB symptoms	Total population	50% (2007)	70%	80%	90%	NTP Reports	Quarterly	HIV status, age sex, Province
23	Percentage of newly diagnosed HIV positive people started on IPT	IPT coverage	Number of newly diagnosed HIV positive people started on IPT	Total number of newly diagnosed HIV positive people eligible for IPT*	10% (2013)	20%	30%	40% (2016)	IPT Register	Quarterly	Age. Sex, province
24	Case detection Rate (Smear positive)	The program's capacity to detect people with infectious TB disease (source of infection)	Number of newly diagnosed smear positive TB detected in a given period	Total population	64%	70%	75%	80%	NTP Reports	Annually	Age. Sex, HIV status, province
25	TB Treatment success rate	The success of the TB programme in ensuring treatment compliance	Number of TB patients registered in a specified period who are cured or completed treatment	Total number of all TB patients registered in the same period	86% 2007	88%	90%	95%	NTP Report	Annually	Age, Sex, HIV status, province
26	TB case fatality rate	The success of the TB programme in preventing deaths	Number of all TB patients who died during TB treatment	Total number of all TB patients registered in the same period	<5%	<5%	<5%	<5%	NTP Report	Annually	Age, Sex, HIV status, province

*HIV positive eligible for IPT=HIV+ screened for TB minus HIV+ screened for TB confirmed with active TB

Programme Critical Enabler Indicators

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
27	Number of Community Based Distributor Agents established and active	Prevalence of CBD agents for SRH and HIV commodities	N/A	N/A	TBD			TBD	HMIS	Annual	Province
28	Proportion of women who have experienced physical or sexual violence from an intimate partner in the last 12 months	Progress in mobilisation of society to address gender and sexual equality and address gender-based violence	Number of women who reported physical or sexual violence from an intimate partner in the last 12 months	All women	45%	40%	35%	30%	VSU Survey	Every 3 years	Province, Age
29	# of unfavourable legal frameworks reviewed Improved legal and policy environment for HIV and AIDS programming.	Change in the legal and policy environments that either facilitate or hinder HIV programming	N/A	N/A	1	1	1	1	NCPI	Every 2 years	None
30	Share of domestic financing of the HIV and AIDS response	Ability to mobilise resources for the HIV response locally	N/A	N/A	18 million (2012)			TBD	NASA NCPI	Every 2 years	Province
31	Timely reports on the AIDS response that meet national, regional and international reporting obligations	Progress towards "One M&E System" that meets national, regional and international reporting obligations	N/A	N/A	Annual GARPR Spectrum	Annual GARPR Spectrum	Annual GARPR Spectrum	Annual GARPR Spectrum	Programme Data	Annually	Province

Synergies With Other Sectors

	Indicator	What the Indicator Measures	Numerator	Denominator	Baseline Values	Target Values			Data Source	Frequency	Disaggregation
						2014	2015	2016			
32	% of exposed individuals provided with PEP in accordance with national guidelines in the last 12 months	Reduction of primary infection among people who have been accidentally or forcibly exposed to HIV	Total number of people accidentally or forcefully exposed to HIV and received PEP	Total number of people accidentally or forcefully exposed to HIV	80% 2008	100%	100%	100% (2016)	HMIS	Annual	Male, Female, Province
33	% males and females and who reported an STI in the past 12 months	STI prevalence among males and females in the past 12 months	Number of males/females treated for STIs in the past 12 months	Number of sexually active males/females in the past 12 months	F:34% M: 26% (2007)	F: 17% M: 13%	F: 8% M: 6%	5% (2016) 5% (2016)	HMIS	Annual	Male, Female, Province
34	Current school attendance among orphans and among non-orphans aged 10-14	Progress towards preventing relative disadvantage in school attendance among orphans versus non-orphans	a) Number of children who have lost both parents and who attend school b) Number of children both of whose parents are alive, who are living with at least one parent and who attend school	a) Number of children who have lost both parents b) Number of children both of whose parents are alive who are living with at least one parent	92% (BSS 2009)	95%	98%	100% (2016)	Population-based survey DHS, EMIS	Every two years	Male, Female, provincial
35	% OVC aged 0-17 whose households received free basic external support in caring for the child	Coverage of OVC programmes	Number of households with orphans 0-17 that received basic external support	Number of households with orphans 0-17 sampled.	15.7% (BSS 2009)	25%	50%	65%	DHS	Quarterly	Province, Sex, Age,
36	Number of safe blood units available for transfusion	Availability of safe blood supply	N/A	N/A	113,514 Units (2013)	125,000 Units	140,000 Units	150,000 Units (2016)	Laboratory Records	Quarterly	Province
37	Number of schools implementing Comprehensive Sexuality Education	Roll out of CSE and knowledge of HIV among learners and teachers	N/A	N/A	N/A	N/A	N/A	9,022 schools	EMIS	Quarterly	Province
38	% PLHIV clinically malnourished adult PLHIV receiving nutritional support	Availability of nutritional support among chronically malnourished PLHIV	Number of clinically adult PLHIV receiving nutritional support	Total number of clinically malnourished PLHIV adults	50% (2013)	55%	60%	65% (2016)	EMIS	Annual	Male, Female, Province



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