



MINISTRY OF HEALTH
ELIMINATION OF NEGLECTED TROPICAL DISEASES NATIONAL MASTERPLAN
2019 - 2023



Ministerial statement by the Honourable Minister of Health

Zambia needs a healthy population in order to develop and thrive. The Zambian people are the biggest and greatest asset this country has. As a country we still hold to the affirmation and promise to work towards elimination of Neglected Tropical Diseases. We keep this aspiration and momentum through our vision and mission statement of, “Providing Quality Health Services as close to the family as possible.”

Coming up with this Master Plan re-affirms my government's commitment to work with all cooperating partners, civil society and line ministries in our efforts to control, manage and eventually eliminate the Neglected Tropical Diseases in Zambia. This Master Plan provides us with hope and is our guiding principle in the midst of NTDs. The document is a comprehensive highlight of the goals, objectives and strategies to tackle these diseases in the next five years and beyond.

The biggest challenge of Neglected Tropical Diseases in Zambia is inadequate resources towards prevention, control and case management. The rise in the disease burden of these ailments has a negative effect on the health sector as a whole both socially and economically. It is saddening to note that these diseases mostly affect the poor and marginalized society of the country.

We take sincere pleasure and gratitude to thank all our partners who have contributed in many ways towards prevention, control and management of Neglected Tropical Diseases. It is my sincere hope that this partnership is strengthened even further now that our resolve is elimination of these diseases. As a Ministry we will endeavour to keep our promise, vision and mission statement in the fight against Neglected Tropical Diseases. At all times we will not relent any guidance, advice and support from our partners, civil society and any stakeholder in the fight against Neglected Tropical Diseases.

We believe that with this commitment, together we can eradicate Neglected Tropical Diseases and improve the living standards of our people

**HON. CHITALU CHILUFYA
MINISTER OF HEALTH**

Table of Contents

TABLE OF CONTENTS.....	3
LIST OF FIGURES.....	4
LIST OF TABLES	5
FOREWORD	6
LIST OF CONTRIBUTORS	8
ABBREVIATIONS AND ACROYMS.....	9
INTRODUCTION	11
1. SITUATIONAL ANALYSIS	13
1.1. COUNTRY PROFILE	ERROR! BOOKMARK NOT DEFINED.
1.1.1. Administrative, Demographic and Community structures	13
1.1.2. Geographical Characteristics	16
1.1.3. Socio-Economic Status and Indicators.....	17
1.1.4. Transportation and Communication	17
1.2. HEALTH SYSTEMS SITUATION ANALYSIS	19
1.2.1. Health System Goals and Priorities	19
1.2.2. Analysis of Overall Health System	20
1.2.3. The National Health Policy.....	23
1.3. NEGLECTED TROPICAL DISEASE SITUATIONAL ANALYSIS.....	23
1.3.1. Epidemiology and Burden of Disease	29
1.3.2. NTD programme implementation.....	43
1.3.3. Gaps and Priorities	45
2. NTD STRATEGIC AGENDA.....	53
2.1. OVERALL NTD PROGRAMME MISSION AND GOALS	53
2.2. GUIDING PRINCIPLES AND STRATEGIC PRIORITIES.....	53
2.3. NATIONAL NTD PROGRAMME OBJECTIVES AND STRATEGIES	60
2.4. NATIONAL NTD MILESTONES	64
3. OPERATIONAL FRAMEWORK	69
3.1. SCALING UP ACCESS TO NTD INTERVENTIONS AND TREATMENT AND SERVICE DELIVERY CAPACITY ..	69
3.2. SCALING UP PREVENTIVE CHEMOTHERAPY INTERVENTIONS	ERROR! BOOKMARK NOT DEFINED.
3.3. SCALING UP NTD CASE MANAGEMENT INTERVENTIONS	80
3.4. SCALING UP NTD TRANSMISSION CONTROL INTERVENTIONS	90
3.4.1. Pharmacovigilance in NTD Control Activities.....	92
3.4.2. Strengthening Capacity at National Level for NTD programme management and implementation	92
3.4.3. Enhancing planning for Results, Resource Mobilization and Financial Sustainability	93
3.4.4. Strengthening Government Ownership, Advocacy, Coordination and Partnerships	95

3.4.5.	<i>Monitoring and Evaluation</i>	100
3.4.6.	<i>POST INTERVENTION SURVEILLANCE AND INTEGRATION WITHIN PRIMARY HEALTH CARE</i> 104	

4. OBJECTIVES AND ANNUAL TARGETS ...ERROR! BOOKMARK NOT DEFINED.

4.1.	GENERAL OBJECTIVES	ERROR! BOOKMARK NOT DEFINED.
4.2.	SPECIFIC OBJECTIVES	ERROR! BOOKMARK NOT DEFINED.
4.2.1.	<i>PC-NTDS</i>	<i>Error! Bookmark not defined.</i>
4.2.2.	<i>Specific objectives for CM- NTDs</i>	<i>Error! Bookmark not defined.</i>
4.2.3.	<i>Prevention and Transmission control</i>	<i>Error! Bookmark not defined.</i>
4.2.4.	<i>Coordination and partnership</i>	<i>Error! Bookmark not defined.</i>
4.2.5.	<i>Advocacy and Resource mobilization</i>	<i>Error! Bookmark not defined.</i>
4.2.6.	<i>Capacity building of infrastructure and staff</i>	<i>Error! Bookmark not defined.</i>
4.2.7.	<i>Monitoring, evaluation, surveillance and operational research</i>	<i>Error! Bookmark not defined.</i>

5. ANNUAL OPERATIONAL PLANERROR! BOOKMARK NOT DEFINED.

5.1.	TECHNICAL ACTIVITIES	ERROR! BOOKMARK NOT DEFINED.
5.1.1.	<i>For Preventive Chemotherapy, technical activities include the following elements</i> <i>not defined.</i>	Error! Bookmark not defined.
5.2.	PROMOTION AND DISTRIBUTION OF INSECTICIDE-TREATED BED-NETS AND IN-HOUSE RESIDUAL SPRAYING ERROR! BOOKMARK NOT DEFINED.	
5.3.	BEHAVIOURAL CHANGE PROMOTION OF BUILDING AND USE OF LATRINES	ERROR! BOOKMARK NOT DEFINED.
5.4.	AWARENESS AND SENSITIZATION CAMPAIGN FOR PASSIVE CASE-FINDING.....	ERROR! BOOKMARK NOT DEFINED.
5.5.	MONITORING OF CONTROL AND ELIMINATION ACTIVITIES	ERROR! BOOKMARK NOT DEFINED.
5.6.	FOR PREVENTION AND TRANSMISSION CONTROL, INTRA AND INTER-SECTORIAL COLLABORATION. ERROR! BOOKMARK NOT DEFINED.	
5.7.	ADVOCACY AND RESOURCE MOBILIZATION:	ERROR! BOOKMARK NOT DEFINED.
5.8.	INFRASTRUCTURE AND STAFF CAPACITY-BUILDING	ERROR! BOOKMARK NOT DEFINED.
5.9.	MONITORING, EVALUATION, SURVEILLANCE AND OPERATIONAL RESEARCH: .	ERROR! BOOKMARK NOT DEFINED.
5.10.	NATIONAL COORDINATION OF NTD PROGRAMME IN ZAMBIA	ERROR! BOOKMARK NOT DEFINED.
5.10.1.	<i>Aim and objectives</i>	<i>Error! Bookmark not defined.</i>
5.10.2.	<i>Guiding principles</i>	<i>Error! Bookmark not defined.</i>
5.10.3.	<i>Overview of NTD Programme country coordination mechanisms in Zambia</i> <i>not defined.</i>	<i>Error! Bookmark not defined.</i>

6. ANNEXS 105

6.1.	CO-ENDEMICITY	105
6.2.	DISEASE DISTRIBUTION	108
6.3.	DISTANCES BETWEEN DISTRICTS.....	124
6.4.	COORDINATED IMPLEMENTATION OF PCT.....	125
6.5.	MINISTRY OF HEALTH ORGANAGRAM	126

List of Figures

Figure 1: Zambia Provinces and districts	13
Figure 2: Population Distribution by Province, Zambia, 2010 census	14

Figure 3: Figure 3: Zambia Population structures 2011-2035	14
Figure 4: Governmental structure at national, province and district levels	15
Figure 5: Eco regions in Zambia	16
Figure 6: Monthly temperature and rainfall	17

List of Tables

Table 1: National Health Priority Areas	19
Table 3: NTD Mapping status.....	29
Table 4: Summary of intervention information on existing PCT programme.....	43
Table 5: Summary of intervention information on existing CM programmes.....	44
Table 6: SWOT Analysis of NTD Programme.....	45
Table 7: Strategic agenda framework	54
Table 8: Strategic Objectives.....	60
Table 9: Programme Summary components of WHO recommended Strategies for the control of Endemic NTDs.....	60
Table 10: LF Elimination Milestones	64
Table 11: SCH Elimination Milestones	65
Table 12: STH Elimination Milestones	65
Table 13:Trachoma Elimination Milestones	66
Table 14: IDM Control/Elimination Milestones	67
Table 15: PHASE Milestones	67
Table 16: Types of Mass Drug Administrations	71
Table 17: Activities for strategic priority 1 – Ensure Universal access to NTD chemotherapy.....	73
Table 18: Activities for implementing Strategic priority 1: Strengthen government ownership, advocacy,coordination, and partnership.....	81
Table 19: Case management and chronic care	85
Table 20: Intervention Packages for Transmission Control	90
Table 23: Activities and resources needed for strengthening capacity for NTD programme	92
Table 24: Activities for enhance planning for results, resource mobilization and financial sustainability.....	93
Table 25: List and the roles and responsibilities of sectors and coordination mechanisms in the strategic priority related to coordination	95
Table 26: Activities for Strengthening government ownership, advocacy, coordination and partnership.....	97
Table 27: Strategic priority 4: Enhance NTD Monitoring and evaluation, surveillance and operations research	101
Table 28: Activities for surveillance and sustainability.....	104
Table 29: Coordination Arms	Error! Bookmark not defined.
Table 30: Known disease distribution in Zambia – Lymphatic Filariasis.....	108
Table 31: Known disease distribution in Zambia – STH.....	112
Table 32: Known disease distribution in Zambia – SCH.....	114
Table 33: Known disease distribution in Zambia – Trachoma	117
Table 34:NTD Co Endemicity.....	105

Table 35: Distances between districts	124
Table 36: Algorithm for coordinated implementation of preventive chemotherapy interventions in Zambia (WHO, 2006).....	125
Table 37: MINISTRY OF HEALTH FUNCTIONAL ORGANISATION STRUCTURE	126

Foreword

Neglected tropical diseases (NTDs) are a diverse group of diseases that are most common in tropical and subtropical regions. These diseases most heavily affect people living without access to adequate sanitation, basic infrastructure and health services. In addition to significant morbidity and mortality, these diseases can lead to stigma and discrimination in communities.

These diseases are prioritized not only because of the magnitude and impact of their burden, but also because they are amenable to broad control, elimination or eradication by delivering one or more of the five interventions recommended by WHO. The interventions are: (1) preventive chemotherapy; (2) veterinary public health; (3) provision of safe water, sanitation and hygiene; (4) vector and intermediate host control; and (5) case management and rehabilitation.

With these achievements, the NTD landscape in Zambia is changing. While intensified campaigns can accelerate elimination of some NTDs, efforts are under way to gradually expand focus from dependence on preventive chemotherapy to combining preventive chemotherapy with a whole-of-system multi-sectoral approach to accelerate control and elimination of NTDs. This approach will be informed by accurate determination of burden and distributions through strengthened surveillance, monitoring and evaluation and research, in pre- and post-elimination settings.

NTDs are included in the Sustainable Development Goals. Universal health coverage will be key for NTD control and elimination, helping sustain gains by ensuring that needed health services reach all people, particularly marginalized and neglected populations. The Sustainable Development Goals, present opportunities to accelerate progress on NTDs through whole-of-system multisectoral interventions, such as improvements in water and sanitation, food safety, environmental health and veterinary public health, in addition to health services.

This master plan is intended to guide Zambia, and all other donors and partners, to work together to systematically and progressively, strengthen various weaknesses existing in key programmatic areas and/or contribute to enhancing relevant health system components so that universal and equitable access to essential NTD interventions and services, particularly in hard-to-reach marginalized populations, is achieved and control and elimination of NTDs are accelerated.

The vision of the Zambia free from NTDs is achieved through twin goals:

- 1) Achieve and sustain the status of elimination of NTDs targeted in resolutions of the World Health Assembly, namely yaws, rabies, schistosomiasis, trachoma, lymphatic filariasis and leprosy.
- 2) Achieve and sustain control of other NTDs and alleviate suffering from NTD-associated morbidity and disabilities.

As a Government there is an urgent need to apply the most appropriate strategies considering the available resources and challenges towards the implementation of all activities and programmes.

Monitoring and Evaluation of all these programmes and activities should be the core business of the integrated approach.

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Abbreviations and acroyms

AFRO	-	Africa Region of the World Health Organization
APOC	-	African Programme for Onchocerciasis Control
ACSM	-	Advocacy Communication and Social Mobilisation
CDD	-	Community Drug Distributor
CDTI	-	Community Directed Treatment with Ivermectin
CHANGES	-	Community Health and Nutrition, Gender and Education Support
CHAZ	-	Churches Health Association of Zambia
CHW	-	Community Health Worker
DALYs	-	Disability Adjusted Life Years
DEC	-	Diethylcarbamazine Citrate
DHMT	-	District Health Management Team
DHT	-	District Health Team
GPELF	-	Global Programme for Elimination of Lymphatic Filariasis
HAT	-	Human African Trypanosomiasis
HMIS	-	Health Information Management System
HRH	-	Human Resource for Health
HSSP	-	Health Sector Strategic Plan
IDSR	-	Integrated Diseases Surveillance and Response
IEC	-	Information Education and Communication
IRS	-	Indoor Residual Spraying
ITNs	-	Insecticide Treated Nets
ITI	-	International Trachoma Initiative
IU	-	Implementation Unit
IVM	-	Integrated Vector Management
LAN	-	Lions Aid Norway
LF	-	Lymphatic Filariasis
MADP	-	Mectizan Albendazole Donation Programme
MDA	-	Mass Drug Administration
MDGs	-	Millennium Development Goals
MF	-	Microfilaria
MLGH	-	Ministry of Local Government & Housing

MoAFL	-	Ministry of Agriculture, Food and Livestock
MoESVT	-	Ministry of Education, Science and Vocational Training
MoF	-	Ministry of Finance
MoH	-	Ministry of Health
MoHA	-	Ministry of Home Affairs
MoWA	-	Ministry of Women's Affairs
MoWL	-	Ministry of Water and Land
NAC	-	National AIDS Council
NEPAD	-	New Partnership for African Development
NGO	-	Non Governmental Organization
NGDO	-	Non Governmental Development Organization
OEU	-	Operation Eyesight Universal
PCT	-	Preventive Chemotherapy
PELF	-	Programme for Elimination of Lymphatic Filariasis
PHAST	-	Participatory Hygiene and Sanitation Transformation
SAC		School age children
SAEs	-	Severe Adverse Events
SAFE	-	Surgery Antibiotics, Face washing and Environmental Care
SSI	-	Sight Savers Interanational
SSTH	-	Schistosomiasis and Soil Transmitted Helminths
STH	-	Soil Transmitted Helminthes
SWOT	-	Strengths Weakness Opportunities Threats
TBDOTS	-	Tuberculosis Directly Observed Treatment Therapy
UNICEF	-	United Nations Children Emergency Fund
USAID	-	United States Agency for International Development
WHO	-	World Health Organization

Introduction

Neglected Tropical Diseases are a diverse group of 20 communicable diseases that prevail in tropical and subtropical conditions in 149 countries affecting more than one billion people and costing developing economies billions of dollars every year. They account for an estimated 534,000 global deaths annually and about 90 % of the total NTD morbidity and mortality occurs in the African region. Most NTDs are vector borne, transmitted by mosquitoes, black flies, sand flies, tsetse flies and snails, with a few being transmitted through contaminated water and soil.

Most affected are communities with socio-economic challenges (poor communities), with limited access to safe clean water and lacking sanitary facilities. In most instances such communities have limited access to health care. The NTDs are associated with disfigurement, reduced productivity and cognitive potential which affect the economic development of households, communities and the country. Yet, control and elimination strategies which are safe and simple are available.

Zambia is endemic to four preventive chemotherapy (PC-NTDs) namely Schistosomiasis, Trachoma, Soil Transmitted Helminths and Lymphatic Filariasis targeted for control and elimination through Mass Drug Administration (MDA) and morbidity case management. It is also endemic to case management (CM-NTD) diseases such as Cysticercosis, Human African Trypanosomiasis (HAT) and Leprosy earmarked for elimination. Although these seven Neglected Tropical Diseases have remained a Public Health problem in Zambia for decades, there is hope that their decade long trends may be reversed as observed from some impact assessment surveys following implementation of preventive chemotherapy and case management. If this is sustained, elimination will be achieved and the perpetual poverty and the socio-economical developments that were being hindered by their presence will need to be reversed.

Some neighbouring countries are endemic to diseases like Onchocerciasis that may pose a threat towards an overall elimination of NTDs. In this regard the country is considering the possibility of including Onchocerciasis among the NTD priority diseases depending on the results following mapping exercise that the country intends to undertake. Rabies is also another disease that poses a challenge due to increased reports of dog bites nation wide.

Zambia developed the first NTD multi-year strategic plan for the period 2013-2017. In order to align the NTD multi-year strategic plan with renewed global 2015-2020 goals and milestones for elimination of NTDs, the NTD multi-year strategic plan was reviewed and updated in November 2014 into an NTD Master Plan 2015-2020. Following the implementation of the NTD Master Plan 2015 – 2020, the country successfully mapped the distribution of all PC-NTDs endemic in the country and established an NTD unit in the Ministry of Health Directorate of Public Health. It also provides an annual budget allocation towards the NTD program activities.

In view of the gains scored during the implementation of the NTD Master Plan 2015-2020 which focused on the reduction of the disease burden by controlling, elimination and eradicating targeted NTDs in Africa, the review of the 2015-2020 NTD Master Plan in 2018 is to focus on Elimination of NTDs amenable to preventive chemotherapy. The control of NTDs will greatly contribute towards the 2030 agenda for SDGs especially SDG 3 and SDG 1. The SDG 6 on WASH is an important component of NTD

control and will be implemented through the PHASE strategy. The NTDs have also benefited in partnerships especially through the London declaration of 2012 which led to Pharmaceutical Industry Commitment in supporting NTD Elimination. It is envisaged that with community participation as per Alma ata declaration, elimination of NTDs will be achieved.

The four-pillar approach to accelerate elimination of NTDs by 2030 will comprise of the WHO strategies as follows:

- Preventive chemotherapy
- Case Management
- Vector Control
- Provision of Safe Water, Sanitation and Hygiene
- Veterinary Public Health as

evidence suggests that more effective control results are achieved when all the five approaches are combined and delivered.

The four Pillar strategic priorities to be addressed are:

Pillar 1: Ensure universal access to NTD chemotherapy

Pillar2: accelerate efforts towards environmental and vector control and harness research and innovation of NTD-free status,

Pillar 3: Transform NTD Surveillance into a core intervention and

Pillar 4: Strengthening the resource mobilization, coordination, and inter-sectoral collaboration, for the elimination of NTDs

In operationalizing the 2019-2023 NTD Master Plan, annual action plans, will be used to guide programme implementation. This document is arranged into 4 parts, the Situation Analysis, the NTD Strategic Agenda, Operational Framework and the Budget.

The percentage of urban population is projected at 42.8% by province and ranges from 86% for Lusaka, to 12.1% in Western province (ZPDP 2011-2035). Male: Female ratio is 1.04: 1.07 and the age structure is 17.8% for 0-4 years, 27.9% 5-14 years, 46% for 15-50 years and 7.7% for those above 50 years (Figure 3).

Average population density for Zambia is 17.3 persons per square kilometres. The most populated province is Lusaka with a density of 100.4 persons per square kilometre whereas North Western province has the least with persons per square kilometre.

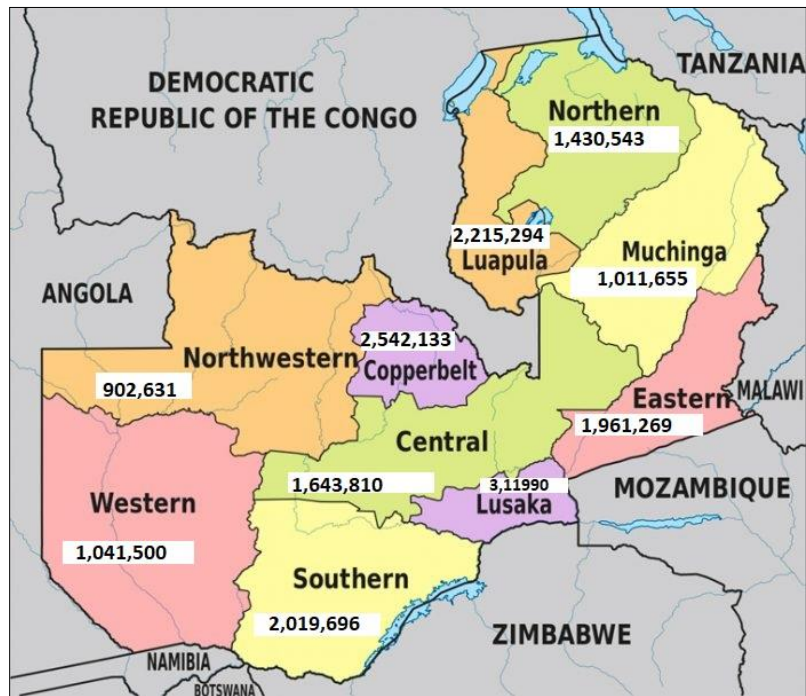
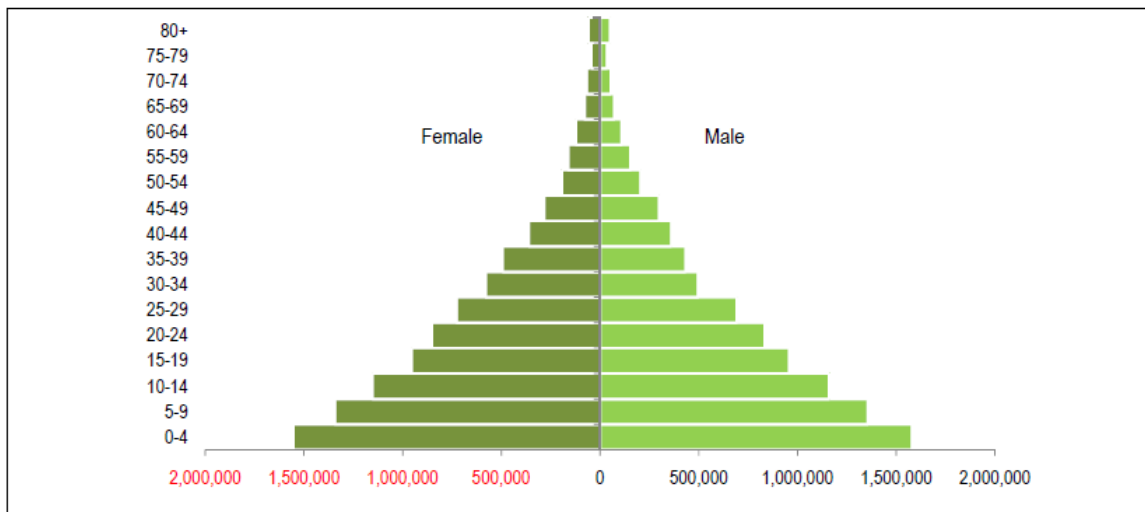


Figure 2: Population Distribution by Province, Zambia, 2010 census

5.6

Language: English is Zambia’s official language. The main vernacular languages are Bemba, Nyanja, Tonga, Lozi, Kaonde, Luvale and Lunda.



Source: Zambia Population and Demographic Projections, 2011-2035

Figure 3: Zambia Population structures 2011-2035

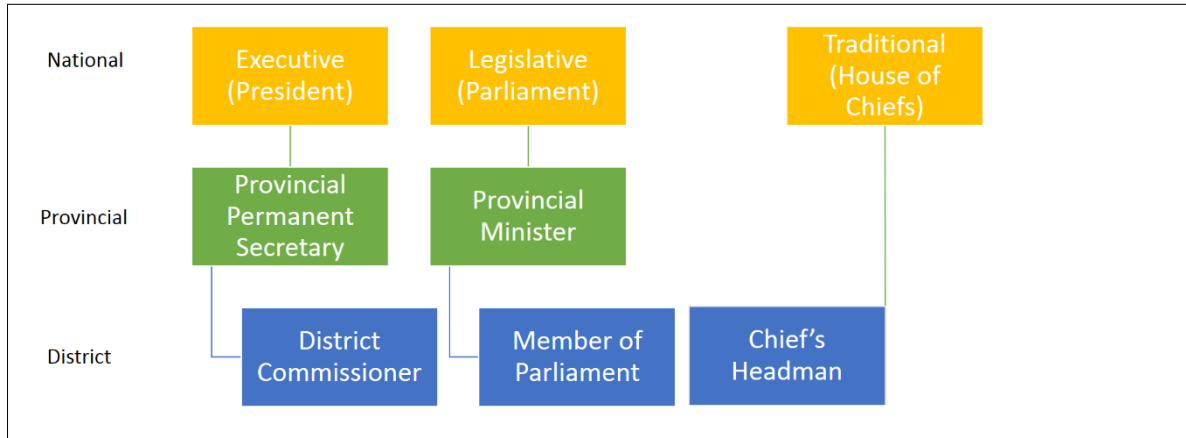


Figure 4: Governmental structure at national, province and district levels **Reconfirm-Agness**

For the program to receive adequate support, the three arms of the government at district level need to be involved so that all aspects are well handled. Under the executive leadership is the District Commissioner who is appointed and oversees that government policies and programs are implemented. The Members of Parliament are under the legislative wing and are in-charge of constituencies in the district. They facilitate and initiate community bound development projects. Finally, the traditional leadership works with the communities and assists in the implementation of the government programs. They are not political.

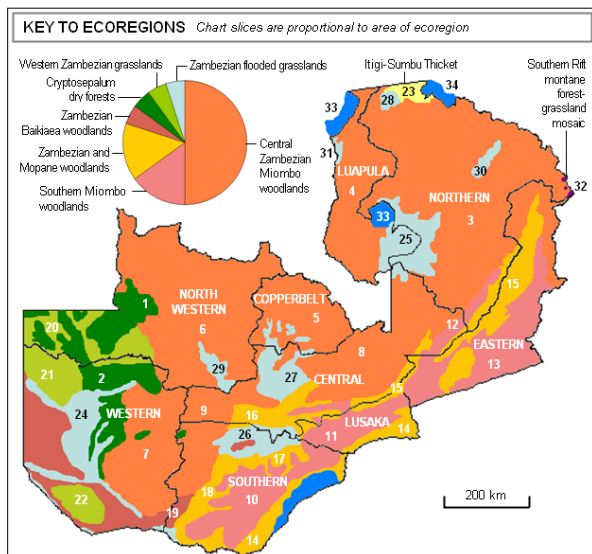
There are several major refugee communities in Zambia which are located in Northern Province, Luapula Province and North Western province. These harbor refugees which are from Democratic Republic of Congo and Angola. In 2017 there has been a large increase in refugees coming from Democratic Republic of Congo due to political unrest in districts bordering Zambia.

1.1.2. GEOGRAPHICAL CHARACTERISTICS

Zambia is a landlocked Sub-Saharan country sharing boundaries with Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of the Congo and Tanzania. It has a total surface area of about 752,612 Km², thus ranking among the bigger countries in South Central Africa. It lies between 8° and 18° south latitudes and longitudes 22° and 34° east. It has a tropical climate modified by the altitude of the country with three main seasons. The wet and warm season starts from November to April, cool and dry season starts from May to July and hot dry from August to October.

Zambia has a number of major rivers that are the main sources of water—the Zambezi, Kafue, Luangwa, Chambeshi and Luapula. The country also has major lakes such as Tanganyika, Mweru, Bangweulu, and the man-made lake; Kariba.

The Zambian terrain is mainly high plateau with some hills and mountains. It also has valleys but the lowest point is the Zambezi River at 329m and the highest is the Mafinga Mountain at 2,301m. The main vegetation is Savannah with areas of tropical grassland and woodland comprising a variety of grass and tree species. The country has seven eco regions.



The northern part of the country receives the highest rainfall, with an annual average ranging from 1,100 mm to over 1,400 mm. The southern and eastern parts of the country have less rainfall, ranging from 600 mm to 1,100 mm annually, which often results in droughts and hence inadequate food. The average rainfall is 10mm of monthly rainfall with a variant monthly total ranging between 30-520mm.

The temperature in the country for most of the districts is similar to the table shown below obtained from the world weather and climate information. The coldest period is between June

and July and the warmest is October as shown.

Figure 5: Eco regions in Zambia (Marri et al 2008)

Zambia's annual average temperature is 20°C and the relative humidity averages between 61.5% per annum and ranges between 34% and 86%. The figures below (World bank) represent Zambia's temperatures and rainfall throughout the year.

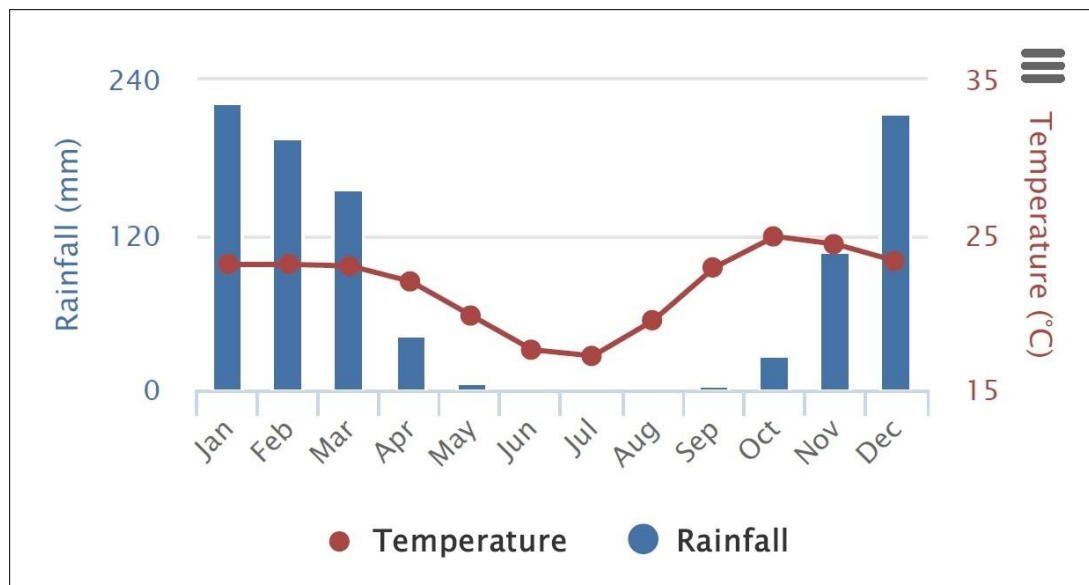


Figure 6: Monthly temperature and rainfall

1.1.3. SOCIO-ECONOMIC STATUS AND INDICATORS

The Zambian economy has continued its recovery in 2017, following subdued economic activity when economic growth fell to 2.9% in 2015, its lowest rate since 1998. The economy was hit by lower copper prices and domestic pressures including an El Niño-induced lower harvest in 2015, and a power crisis in 2016. Growth of the economy increased to 3.4% in 2016 and is expected to increase further to 4.1% in 2017. The World Bank predict Zambia’s projected GDP growth will strengthen to 4.1% in 2017 and further to 4.5% in 2018 and 4.7% in 2019.

The Human Development Index (HDI) of 0.579% which gives the country a rank of 139th out of 177 countries. The poverty headcount ratio puts 57.5% of Zambians at \$1.90 a day in 2011. Income shared by the lowest 20% of the nation is 2.9% of the GDP. Only 65% of the population has a sustainable access to an improved drinking water source and 44% have access to sanitation (2016). The Life expectancy is 61 years, infant mortality rate is 63 deaths /1000 live births and 14.8% of children under 5 years are underweight (2016)

1.1.4. TRANSPORTATION AND COMMUNICATION

Zambia’s communication system comprises of airports, road network system, railway and water transport. Zambia’s four international airports are Lusaka-Kenneth Kaunda, Livingstone-Harry Mwanga, Mfuwe and Ndola- Simon Mwansa Kapwepwe. Secondary airfields and airstrips are found in Chipata, Kitwe, Kasama, Mongu, Solwezi and Mansa. A number of the international airports and airfields have

undergone a programme of refurbishment and renovation in recent years. Situated 24 kilometers from the centre of Lusaka city, Kenneth Kaunda International Airport is Zambia's main airport.

1.1.4.1. **ROAD NETWORK**

A total of 38,763 kilometres, of which 8,200 kilometers are bituminous and another 8,000 kilometers all weather gravel roads. Although a number of main routes have been upgraded, there are still many kilometres of gravel and dirt roads, and during the wet season many of these untarred roads become impassable. This means most of the schools are accessible to via the road throughout the year and in some provinces like Northern, Luapula and Western province which are flood prone. Within rural communities are walking and bicycle paths. Annex 6.3 shows the distance between districts that could be used for planning purposes.

1.1.4.2. **RAILWAY SYSTEMS**

There are two major rail routes linking Zambia with Zimbabwe and Tanzania, and three main internal lines which run from Lusaka to Livingstone, Lusaka to the Copperbelt and Kapiri Mposhi to the northern border with Tanzania. The railway line system is comprised of 2,157 kilometers (narrow gauge) and 891 kilometers of the Tanzania-Zambia Railways Authority (TAZARA).

1.1.4.3. **WATER TRANSPORT**

Water transport is mainly found on major rivers and lakes. The water bodies support fishing activities and transport linkages within the country and between neighbouring countries.

1.1.4.4. **INTERNET SYSTEM**

Broadband and wireless connections are becoming increasingly common, with services widely available in most districts.

1.1.4.5. **TELECOMMUNICATIONS**

The communication system in Zambia is generally good. There are three mobile telephone operators – Airtel, MTN and Zamtel. Mobile penetration stood at 100 percent by December 2014. Mobile subscription is 74.9/100 people as of 2017 (World Bank).

The mobile phone services have improved tremendously but not all areas have network coverage. All the three mobile operators have a wider network coverage reaching some remote parts of the country. Internet services are available in all the districts of the country but there is a limitation to just around the DHOs, councils and internet cafes at shopping centres.

1.2. Health Systems Situation Analysis

1.2.1. HEALTH SYSTEM GOALS AND PRIORITIES

Goal: To improve the health status of people in Zambia in order to contribute to increased productivity and socio- economic development.

The National Public Health Priorities are:

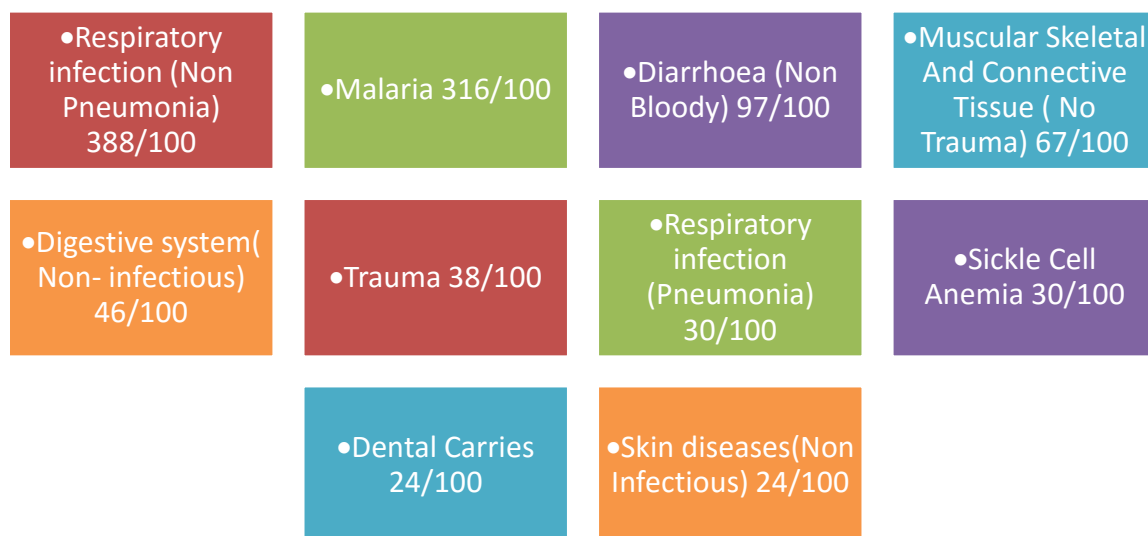
Public Health Priorities	Health System Priorities
<ul style="list-style-type: none">• Primary health care• Maternal, neonatal and child health, youth and adolescent health• Communicable diseases, especially malaria, HIV and AIDS, STIs and TB• NCDs• Disease outbreaks and epidemic control, public health surveillance• Environmental health and food safety• Health service referral systems• Health promotion and education• Community health• Social determinants of health	<ul style="list-style-type: none">• HRH• Essential drugs and medical supplies• Infrastructure and equipment• Health information• Health care financing• Leadership and governance

Table 1: National Health Priority Areas

The 2015 Mid-Term Review report showed that Zambia's epidemiological profile was characterized by the high prevalence and impact of preventable and treatable communicable diseases, particularly malaria, HIV and AIDs, sexually transmitted infections (STIs) and TB. Further, there was a growing burden of non-communicable disease (NCD), including mental health problems, cancer diseases, trauma, sickle cell anemia, diabetes mellitus, hypertension, and cardiovascular diseases (CVDs), chronic respiratory disorders, blindness and eye refractive defects, oral health problems, and maternal and child health problems.

Analysis of disease trends from 2011 to 2015 indicate that malaria remained the leading cause of morbidity and mortality in the country. With an HIV prevalence estimated at 13.3%, Zambia is one of the most affected countries in the world (CSO, ZDHS 2013 14). Different diseases have varying disease burdens: some diseases cause premature death, while chronic conditions may cause long-term disability and impose a great emotional and monetary toll for patients, family members, and society.

The ten (10) major causes of morbidity in Zambia as at 2015 per 100 population, all age groups; are:



Although the NTDs have not been specifically classified among the top 10 diseases, they constitute a major cause within the broad listings especially in the musculoskeletal, digestive, eye, genital, urinary, diarrhoeal and skin diseases. According to WHO there are 149 countries and territories where NTDs are endemic, at least 100 of which are endemic for 2 or more diseases, and 30 countries that are endemic for 6 or more and Zambia is in the latter category.

1.2.2. ANALYSIS OF OVERALL HEALTH SYSTEM

The Government of Zambia has prioritized health as a key economic investment to spur the country to become a prosperous middle – income country by 2030. The NHSP (2017 - 2021) is anchored on a National Transformation Agenda, which recognizes the importance of the health sector in improving national productivity. Investments in the health sector will be treated as inputs toward raising overall productivity and hence contributing to economic growth. The focus for the NHSP shall be on attaining Universal Health Coverage using the primary health care approach. The Zambian Government has also commenced an NTD control and elimination programme in an effort to achieve the targets set out by the WHO for the African Region by the year 2020 as outlined in the NHSP 2017 - 2021.

1.2.2.1. **HEALTH CARE DELIVERY SYSTEM**

Zambia is divided into 10 administrative provinces and 115 districts. Health management is done through provincial health offices PHOs (10), DHOs (115), and statutory bodies. The country has 8 third - level hospitals, 34 second - level hospitals, 99 first - level hospitals, 1,839 health centres, and 953 health posts. All third - level hospitals are Government owned while 26 of the second - level hospitals are Government owned, and 8 are owned by the Faith Based Organisations (FBOs).

The health services in Zambia are provided by four main players, namely the Government, faith - based (not – for - profit) providers, the mines, and private (for - profit) providers. The public sector is the

biggest health provider; 90% of patients seek care in facilities owned and run by the Government (Masiye et al., 2010). The national level is responsible for overall coordination and management, policy formulation, strategic planning, and resource mobilisation.

The health service delivery system mirrors the political administrative structure. The PHO is the link between the national and district level and is charged with backstopping provincial and district health services. The provincial is also tasked with the provision of second - level referral services (through general hospitals).

The district is responsible for implementation of health promotion, preventive, curative, and rehabilitative services. Administratively, the district health office is responsible for coordinating service delivery at that level. Each district has a district hospital, which provides first - level referral services.

Below the district there are health centres, which provide both static and outreach activities. These are staffed by a clinical officer, midwife, nurse, and environmental officer. The main activities at health centre level are predominantly health promotion and disease prevention. There are some limited curative services provided, too, with complicated cases being referred to first -level district hospitals. Each health centre is responsible for running key health programmes, which include maternal, newborn and child health, communicable and non - communicable diseases, environmental, water and sanitation, school health and nutrition, and epidemic preparedness (NHSP, 2017 - 2021).

The NHSP is operationalized through the processes and systems of the Government's MTEF and the annual budgets and plans. These action plans are jointly developed and implemented by the MOH and its CPs. All the structures from the central level, provinces, hospitals, statutory bodies, districts, and training schools have annual action plans, which are independently implemented.

The MOH and its CPs increasingly use health sector indicators for performance M&E. This M&E of sector performance takes place at different levels. The sector uses the SWAp model, which is operationalised through technical working groups (TWGs), policy meetings, sector advisory group meetings and, annual consultative meetings. The review of sector performance takes place on an annual basis through the JARs. Further assessments are undertaken through mid – term reviews and final evaluations. Zambia's health system has been decentralized to district and hospital levels. The Provincial Medical Office, second - and third - level hospitals and central hospitals, HOs, and training schools receive funds directly from Ministry of Finance (MOF). The GRZ has in its new constitution added decentralisation as one of the ways to develop the local levels. Decentralisation will be by devolution where local government authorities will be responsible for delivering public services in local health, primary education, agriculture extension and livestock, water supply, and local road maintenance.

1.2.2.2. **HUMAN RESOURCES FOR HEATH**

As of December 2016, the Ministry had an approved establishment of 63,057 positions, but only 42,630 were filled, representing 68% of the approved establishment. Worth to note is that during 2016, the Ministry recruited a total of 2,071 health workers against the targeted 2,500 health workers. In regard to the NTD Unit there are now dedicated staff at national level while at other levels of care the unit works through the existing structures.

1.2.2.3. **INFRASTRUCTURE DEVELOPMENT**

Positive strides were also made in infrastructure upgrade and construction. As of December 2016, 275 out of 650 health posts were built and are now operational. Furthermore, 36 district hospitals were under construction, while Matero and Chilenje Health Facilities have been upgraded. The University Teaching Hospitals (UTHs) and provincial hospitals were undergoing modernization with the installation of computerized tomography (CT) scans, mammography equipment. Intensive care units (ICU) in some selected general hospitals had also been installed.

The construction of the National Health Training Institute with a 3,000 student capacity is nearing completion, with 70% of construction work done. Construction of 240 in - patient bed capacity at the Cancer Disease Hospital (CDH) was completed and is now operational.

1.2.2.4. **DRUGS AND MEDICAL SUPPLIES**

To ensure commodity (drugs and medical supplies) security in the country, significant investment has been made to upgrade Medical Stores Limited (MSL) infrastructure and to establish regional hubs such as Mongu, Choma, Chipata, and Ndola, which are now all operational. NTD drugs are donated by partners through WHO and flows into the Drugs Logistic Management System of the Medical Stores Limited where they are distributed to NTD implementing provinces and districts like all other drugs.

1.2.2.5. **PHARMACOVIGILANCE SYSTEM**

Pharmacovigilance is a science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drugs related problem. The Zambian Government has recognized this need and under the Pharmaceutical Act (No.14) of 2004, the Pharmaceutical Regulatory Authority (PRA), was established whose functions among others include post- marketing surveillance and adverse drug reaction monitoring. This is done through the National Pharmacovigilance Unit (NPVU) which is responsible for day-to-day spearheading and coordination of pharmacovigilance (safety-monitoring) activities. The main goals of the NPVU include;

- Reducing risks of morbidity and mortality due to drug use by early detection of drug safety problems;
- Improvement of patient care and safety in relation to the use of medicines;
- Improvement of public health and safety in relation to the use of medicines;
- Contributing to risk-benefit analysis of medicines and promote safe, rational and cost-effective use of medicines;
- Promotion of understanding, education and training in pharmacovigilance and provision of effective communication with health professionals and the general public.

It receives and processes all reports. Working closely with the Expert Review Panel, it is responsible for the review, categorization and follow-up of reports. The NPVU through the Medicines Committee of the PRA advises the Board of the PRA on matters related to pharmacovigilance. The NPVU serves as a repository for any research findings relevant to pharmacovigilance. Other specific functions include:

- providing adverse Medicines reactions reporting forms
- developing manuals and guidelines for health facilities, laboratories and the general public;
- training health workers in the use of report forms;
- collecting and analysing data

Currently the pharmacovigilance activities are being coordinated by the Copperbelt University Medical Department.

1.2.2.6. **HEALTH CARE FINANCING**

To improve health care financing, the Government of Zambia has established the National Health Insurance Scheme (NHI) into which shall be paid all contributions authorised under this Act and out of which shall be met all payments authorised to be paid under this Act. The objective of the Scheme is to provide universal access to quality insured health care services in accordance with this Act. (Abraham Mwansa (2017) Zambia National Health Insurance Bill).

1.2.2.7. **HEALTH INFORMATION**

Efforts have also been made to enhance information to guide planning and decision making at district and hospital levels countrywide. This has also been extended to the community level through the introduction of community health information systems. NTD data is obtained through the main stream DHIS2 and supplemented through MDA campaigns reports.

1.2.2.8. **LEADERSHIP AND GOVERNANCE**

Health systems leadership and governance deals with the interrelationships, roles, and activities of the various agencies in the production, distribution, and consumption of health services. The organizational structures governing these processes are also considered in dealing with leadership and governance issues. IHP+ provides a framework for analysing governance of the health sector by focusing on: strategic vision; participation and consensus orientation; rule of law; transparency; responsiveness of institutions; equity, effectiveness, and efficiency; accountability; intelligence and information; and ethics.

1.2.3. **THE NATIONAL HEALTH POLICY**

The National Health Policy sets out the guidelines for directing the implementation of national health strategies. The Health Policy is anchored in the devolution of functions to the lower, District level. The overall National Decentralization Policy provides the framework on which the sector policy operates; it specifies devolution of functions and authorities with matching resources to local authority levels. Under the devolved governance system, the central level is expected to provide policy, strategic guidelines, overall coordination, and M&E. The local devolved units are in turn expected to concentrate on programme implementation.

The health policy, which was revised in 2012, provides overall guidance to the sector. The policy emphasizes the importance of decentralization, which is expected to ensure effective participation of communities and hence assure relevance of interventions. The district forms the basic point of reference for the articulation of peoples' power in health care. Through district health Offices, popular representation and technical/professional interests will provide an opportunity to give Zambia a health care system that is responsive to local and national interests and needs. While recognizing the

importance of bottom-up planning in the sector, the policy also recognizes the importance of provincial and central level actors in providing technical guidance to the district and other local levels of service delivery.

Further, service delivery has been defined to follow a PHC approach. The definition of PHC in Zambia is action-oriented, focused on promotive, preventive, curative, rehabilitative, and palliative care efforts within and outside the health sector. In a Zambian context, PHC would not merely mean 'accessibility to health services' but also peoples' participation in improving their quality of life and gaining power to master their affairs for health improvements. The PHC approach is, therefore, expected to address the main health problems in the community. In doing so, particular attention will be given to people in rural and peri-urban areas, the underserved, high-risk, and vulnerable groups, such as women, children, and the youth.

Participation and Consensus Orientation

The health sector has diverse partners who provide financial, material, and technical support. The coordination challenges arising from such partnerships necessitate coordination mechanisms. From the inception of health reforms, the MOH adopted the SWAp through which CPs were expected to provide support to the sector. The CPs were expected to align their interventions with the MOH priorities as specified in the NHSP and in line with international obligations such as the IHP+ Principles and Paris and Busan Declarations.

1.2.3.1. *OVERALL FRAMEWORK FOR COORDINATION*

The overall framework for coordination in the sector is in line with the broader framework as detailed in the Joint Assistance Strategy for Zambia and in harmony with the overall national planning framework.

The coordination arrangements in Zambia were generally deemed to have been successful and were used as a model for other countries. Despite most of the CPs buying into the SWAp model, a few still remain outside these arrangements, among them the Global Health Initiatives and the President's Emergency Plan for AIDS Relief, which preferred parallel structures and financing mechanisms. In an effort to address this and to further pursue the agenda on harmonization and alignment from the Paris Declaration, an addendum to the memorandum of understanding (MOU) was drafted in collaboration between partners and within the framework of IHP+.

All the efforts to consolidate the coordination of the CPs have been done through signing of MOUs with partners, which provides modus operandi between MOH and health partners. In 2009, an attempt was made to sign an IHP+ compact as an addendum to the existing MOU as way of strengthening the SWAp coordination mechanism.

Moving forward, it is important that trust between the Government and CPs is sustained and that the structures are further developed to be truly sector wide, including more partners in both planning and implementation of programmes. It would be advisable to improve accountability by broadening the

membership of GRZ/CP consultative meetings by inviting other players, such as the civil society and private sector actors. Other opportunities that could be exploited to improve accountability include:

- a) The IHP+ process could provide active support and expertise for partners to resolve issues and review mechanisms for the Zambia health SWAp
- b) The initiation by the U.S. Government of greater harmonization involving the development of a five-year horizon for a cooperation framework on HIV and AIDS. It is expected that the framework would be fully supportive and aligned with the National Strategic Frameworks and would use existing coordination mechanisms such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) or IHP+ structures.
- c) The imminent strategy of using the national planning frameworks for disbursement of the GFATM.

Regulatory Functions

The sector is currently operating without a legislative framework, and it is expected that a bill to replace the 2005 Health Services Act will be presented during the 2017 Parliamentary session. In addition, there are other on-going legislative activities, such as the Mental Health Bill, Public Health Act, Tropical Diseases Research Act, Flying Doctor Services' Act, Food Safety and Quality Bill, Human Tissue Act, Traditional Health Practitioners' Bill, Zambia Medical Association Bill, Tobacco Control Bill, and SHI Bill. The passing of these bills will improve the legislative environment in the sector.

The MOH has delegated regulatory functions to public statutory bodies, such as the Health Professional Council of Zambia (HPCZ), General Nursing Council (GNC), National Radiation Protection Authority, and NFNC. Other statutory bodies include: ZNBTS, Zambia Flying Doctors Services (ZFDS), National AIDS Council (NAC), MSL, and the Tropical Disease Research Centre (TDRC).

The HPCZ is a statutory regulatory body established under the Health Professions Act No. 24 of 2009 of the Laws of Zambia. HPCZ is mandated to register and regulate all health facilities in Zambia, both public and private, and training institutions teaching health sciences. The GNC is a statutory body established in 1970 under the Nurses and Midwives Act No. 55 of 1970, which was repealed and replaced by the Nurses and Midwives Act No. 31 of 1997. The GNC is responsible for ensuring that members of the public receive the best possible care. The GNC sets, monitors, and evaluates performance standards for nursing and midwifery education, clinical practice, management, and research. The NFNC is a statutory body that was established in 1967 by an act of Parliament, Chapter 308, No. 41. The NFNC serves under the MOH as an advisory body to the Government on matters concerning food and nutrition. It is mandated to promote and oversee nutrition activities in the country, primarily focusing on vulnerable groups such as children and women.

The Zambia Medicines Regulatory Authority, formerly the Pharmaceutical Regulatory Authority, is the statutory national medicines regulatory body for Zambia established under an act of Parliament, the Medicines and Allied Substances Act No. 3 of 2013 of the Laws of Zambia. The act empowers the

authority to regulate and control the manufacture, importation, storage distribution, supply, sale, and use of medicines and allied substances.

Transparency

At the national level, plans and budgets are prepared and discussed in consultative processes. Budget and planning follow a bottom-up approach. Lower levels make proposals, which are taken to the provincial and national levels for consolidation and presentation to the Treasury for allocation. The annual budgets fall within the MTEF.

The Auditor General's office performs audits of expenditures of all MOH agencies once every year and submits such reports to Parliament. In addition, the MOH has in place an Internal Audit unit, which is aimed at enhancing accountability at all levels of service delivery in the MOH. The roles of Internal Audit, as established under section 11 of the Public Finance Act of 2004, are:

- I. To ascertain that the risk management and internal control systems are in place and continually being improved and optimized in response to an ever changing environment
- II. To provide reasonable assurance to the Controlling Officer, Sub-Warrant Holders, and the Secretary to the Treasury that internal controls exist and are being complied with as required by the law and other regulations
- III. To ascertain, evaluate, and improve on the governance processes put in place by management.

Accountability

At the local level, the recently completed JAR indicates that village health committees are operational and do play a significant role in supporting the local health services, also from a governance perspective. District Health Advisory Committees were not functioning in a number of districts. More information is required on how to make them functional and how they can support management at district level. It is hoped that the decentralization implementation plan will also include this important aspect of health management. Other governance structures available at the district level include procurement committees, financial committees, and audit committees.

At the national level, the Mutual Accountability Framework guided the relationship between the Ministry and its CPs. The Governance Capacity Strengthening plan has been established to enhance accountability systems, namely: procurement, audit, financial management, planning, and budgeting systems. Under this framework, the MOH has put in place a set of indicators for monitoring the capacity strengthening of accountability systems.

Responsiveness of Institutions

The health services are delivered through Government institutions, NGOs, and the private sector. Services provided by the public sector are free or provided at a nominal charge in urban areas. Apart

from provision of some drugs and other commodities free of charge, private health providers are not subsidized. The NGO health providers are dominated by churches, which are concentrated in rural areas, where access to services is difficult for the residents.

1.2.3.2. **GAPS AND IMPROVEMENTS**

At the local level, village health and health facility committees provide an opportunity to capture views and sentiments from the community. However, any mechanisms to capture perceived or actual demand of services are not institutionalized. There are no effective tools for management to capture the views and experiences of communities. There is obvious need for improvement in this regard. A system for capturing this information and using it for management purposes is required.

There have been improvements in the supply of drugs and medical supplies to health facilities. The Government and CPs have increased the drug budget support by more than 100%, leading to about 78% (MTR 2014 main report) availability of essential medicines and medical supplies in the public sector. Zambia has identified essential medicines, which have been designated as tracer drugs and are used as the basis for determining the availability of medicines in health facilities. Further improvements in the availability of essential medicines will require strengthening of the national supply chain management and improved coordination.

The pharmaceutical sub-sector has further been affected by human resource challenges. There are inadequate pharmaceutical personnel at service delivery points, resulting in pharmaceutical, LMIS, and supply chain functions being performed by nursing or clinical staff. This necessitates the development of an HRH workforce plan for supply chain specialists, clinical pharmacists, and public pharmacists.

1.2.3.3. **EQUITY**

The country has made some commendable achievements in terms of service delivery for all population groups. However, some avoidable gender and socio-economic disparities have persisted. For instance, attended deliveries are more than three times as usual among the highest level of income quintile and among women in urban areas compared with poor women in rural settings. Contraceptive use is generally at a low level in Zambia, and the differences between poor and rich and urban and rural are similar to those for attended deliveries. In terms of malaria, IRS benefits the richer households significantly more than poor households. Further, in terms of HIV testing, people in the richest quintile are two-thirds more likely to be tested than people in the poorest quintile. From a gender perspective, disease prevalence is higher among men, while treatment use is higher among women.

The question of targeting is important for equity-focused interventions. A significant weakness is the poor or insignificant targeting of poor or underprivileged households. Apart from possible targeting of these groups in the performance targets within the health sector, there are some promising initiatives ongoing, such as:

(i) the participatory reflection and action methods tested in four districts, and

(ii) the Social Cash Transfer Scheme and Public Welfare Assistance Scheme. Particularly the latter more technical approach might be interesting to study in relation to financing of health care.

In trying to address these and other disparities in service delivery, the government has implemented mechanisms aiming at distributing health resources more equitably:

The resources allocation criteria for district health grants. The criteria are based on a material deprivation index. The per capita allocation is varied based on a score derived from a set of deprivation indicators; districts are ranked from the poorest to the richest, with the poorer districts having a higher weight and attracting more resources. The district grant formula only applies to less than 50% of the health ministry budget. There is need to revise the formula.

1.3. Neglected Tropical Disease Situational Analysis

1.3.1. EPIDEMIOLOGY AND BURDEN OF DISEASE

Zambia has had an active NTD program since 2003 with the start of an LF control programme. There are 7 endemic NTDs, Lymphatic Filariasis, Schistosomiasis, Soil-transmitted Helminthiasis, Trachoma, Cysticercosis, Leprosy and Human African Trypanosomiasis. Mapping for LF, SCH, STH, and Trachoma has been completed and full details can be found in the annex, starting in Table 26.

This section provides the current known status of NTDs endemicity and current control interventions for the common NTDs in Zambia. Interventions and activity plans have been put in place to finalize areas that still need baseline information for those diseases that are reported here and those with no updated information. Full details can be found in the annexes.

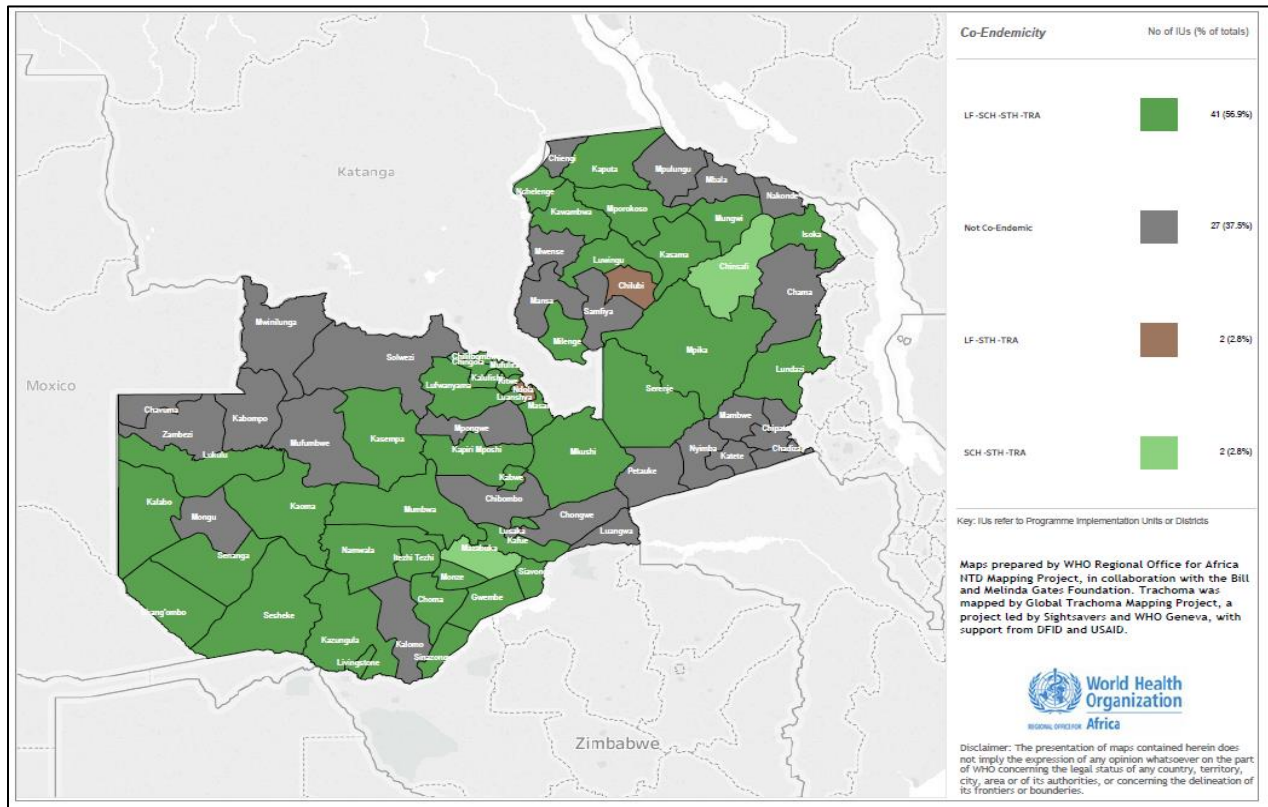


Figure 7: Neglected Tropical Diseases Co-endemicity in Zambia [Edit The map](#) -Trecious

Table 2: NTD Mapping status

Endemic NTD	No. of districts suspected to be endemic	No. of districts mapped or known endemicity status	No. of districts remaining to be mapped or assessed for endemicity status
Cystercecosis	115	0	115
HAT	30	5	0
LF	0	115	0
Leprosy	15	0	115
SCH	0	115	0
STH	0	115	0
TRA	7	103	

*Either gather the mapping data for Cystercecosis, HAT, Leprosy or conduct mapping

1.3.1.1. **LYMPHATIC FILIRIASIS**

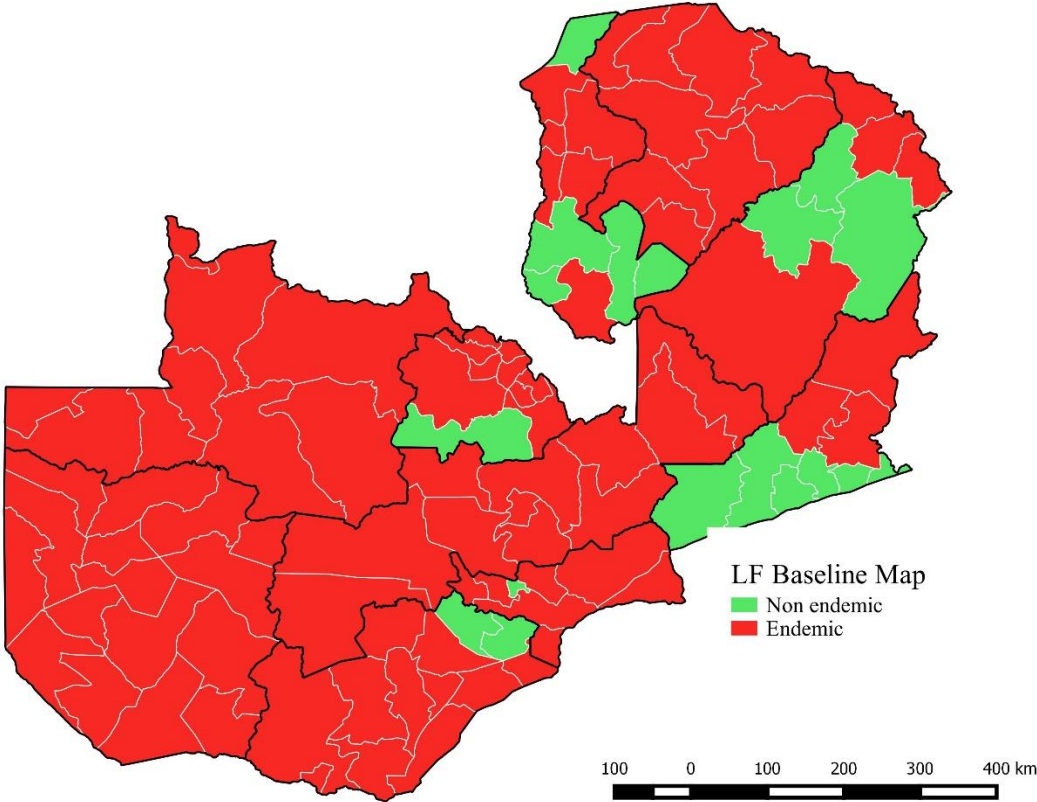


Figure 8 Lymphatic Filariasis - Endemicity / Risk Categories and Population by Implementation Unit in Zambia

Background

Lymphatic Filariasis is a debilitating disease that is estimated to affect 856 million people in 52 countries worldwide remain threatened by LF and require preventive chemotherapy to stop the spread of this parasitic infection. It is caused by the filarial worm *Wuchereria bancrofti* and transmitted by mosquitoes. Once infected the disease may not manifest for several years (up to 20 years) and causes debilitating tragic morbidity namely: -

- Lymphedema: swelling of the extremities; it can affect the breasts, legs and/or arms of both men and women. Once the damage has been caused, it is not possible to fix the damaged tissue.
- Hydrocele (scrotal swelling): inflammation is found around the genitals

In 2003 the Government of Zambia, Ministry of Health started a programme to eliminate LF as a public health problem by mapping the distribution of the disease. Prevalence mapping was conducted between 2003-2011 using the rapid immunochromatographic test (ICT) card and found an overall prevalence rate of 7.4% (range 0-54%) in 85 districts and present in all 10 provinces. 95% of the population in endemic areas are at risk of LF.

In 2000, WHO launched the Global Programme to Eliminate LF. The elimination strategy has two aims:

- To interrupt transmission through mass drug administration (MDA)
- To alleviate the suffering of clinically affected populations through morbidity management and disability prevention (MMDP)

In 2012 a baseline survey took place in Western Province and in 2014 baseline surveys were carried out in the remaining 9 provinces, prior to MDA starting.

Mass Drug Administration

Zambia is not onchocerciasis endemic, but neighbouring countries are and we suspect cross board transmission and influx of refugees from neighbouring countries and beyond. Drugs used for MDA are Albendazole (ALB) and Diethylcarbamazine (DEC). The MDA is carried out via a mixture of door to door distribution and distribution points it follows directly observed treatment method and is carried out by volunteer Community Drug Distributors.

Western Province carried out MDA in 2013 and scaled up to national scale in 2015. A summary of the coverage is detailed in the below graph.

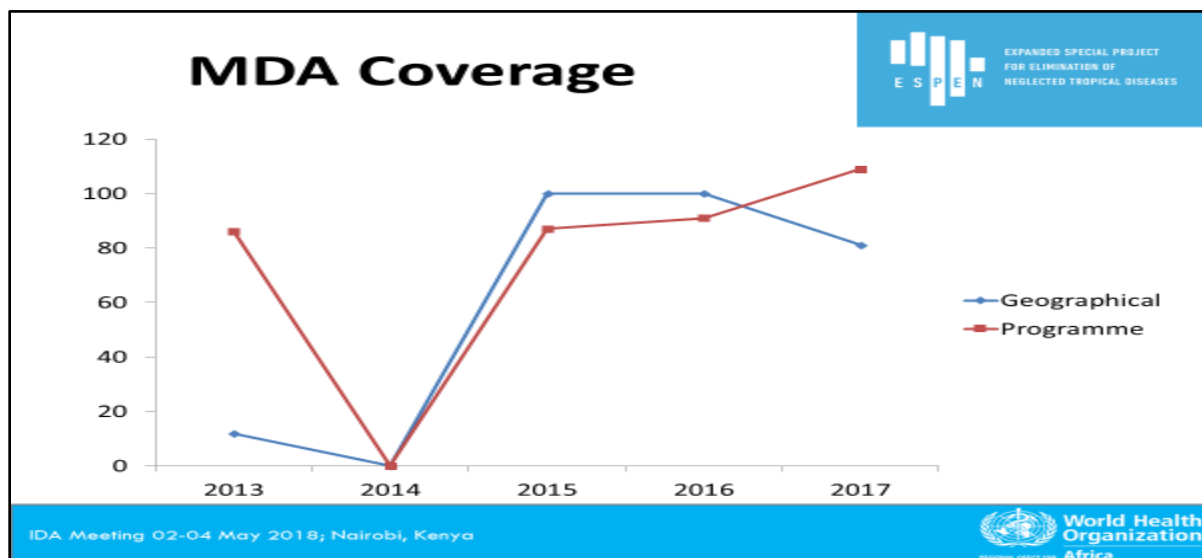


Figure 9: LF Coverage

Monitoring and Evaluation

Baseline surveys were carried out prior to MDA which showed a significant decline in prevalence since the mapping took place.

After each of the national MDAs an independent coverage survey, using WHO protocol has taken place to verify the programme coverage data provided by the MoH. In 2015 the verified coverage was 92% and in 2016 it was 87% (the 2018 survey is not yet analysed). This is well above the WHO threshold of 65% coverage for an effective MDA.








In 2017, after three round of MDA a mid-point sentinel site survey, as per WHO protocol took place in Western Province to measure the impact of MDA. The results show 0% prevalence. In 2018 a mid-point sentinel survey was under taken in the remaining 9 provinces and the results are yet to be published.

Morbidity

While conducting MDA data on LF morbidity is also collected by CDDs. They are also provided with a postcard to further assist with identification. During the 2017 MDA implementation 652 hydroceles and 654 lymphoedemas were identified. However, followup to verify these cases has not yet been done.

In 2018 additional morbidity mapping will take place to gather further evidence of numbers and a LF morbidity management plan will be developed.

Identification of Patients with Lymphoedema and Hydrocele

				
1 MILD	2 MODERATE	3 SEVERE	ARM LYMPHOEDEMA	BREAST LYMPHOEDEMA
Lymphoedema is tissue swelling caused by fluid accumulation. It is most common in the arms, legs and breasts				
Hydrocele is urogenital swelling, primarily of the scrotum				
				

1.3.1.2. **SCHISTOSOMIASIS**

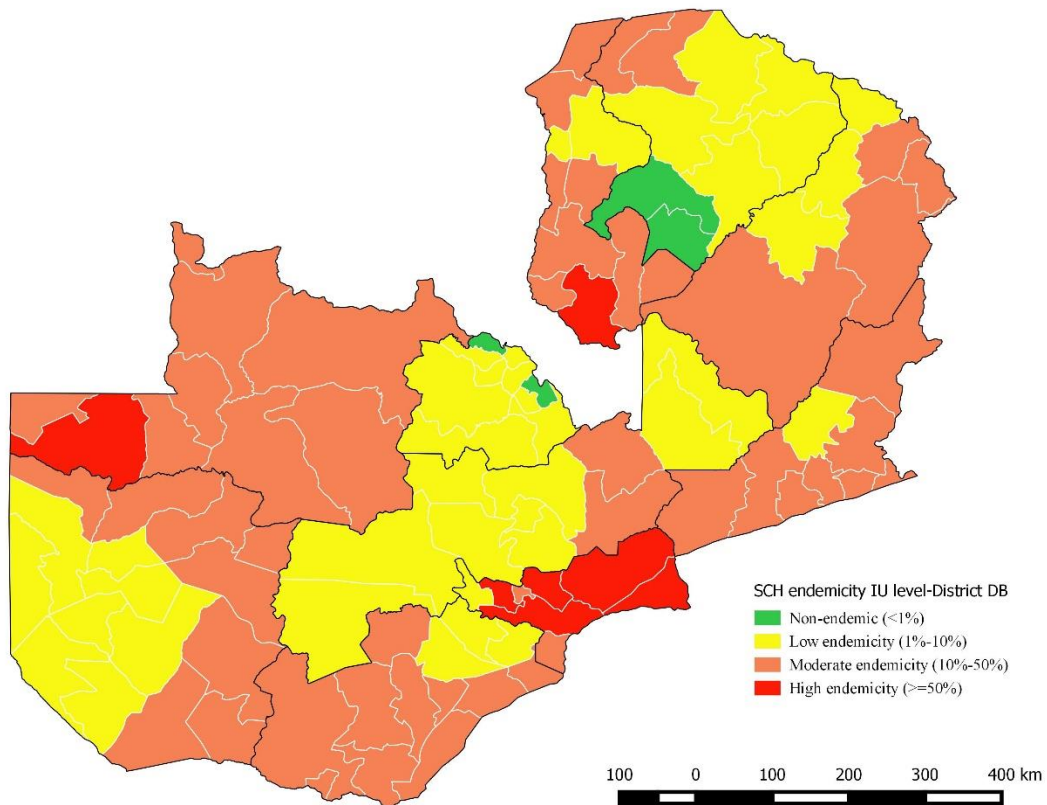


Figure 10: Schistosomiasis - Endemicity / Risk Categories and Population by Implementation Unit in Zambia

Background

Schistosomiasis is an acute and chronic parasitic disease caused by blood flukes (trematode worms) of the genus *Schistosoma*. Schistosomiasis mostly affects poor and rural communities, particularly agricultural and fishing populations. Women doing domestic chores in infested water, such as washing clothes, are also at risk and can develop female genital schistosomiasis. Urogenital schistosomiasis is also considered to be a risk factor for HIV infection, especially in women. Inadequate hygiene and contact with infected water make children especially vulnerable to infection.

Intestinal schistosomiasis can result in abdominal pain, diarrhoea, and blood in stool. Liver enlargement is common in advanced cases and is frequently associated with an accumulation of fluid in the peritoneal cavity due to increased blood pressure (hypertension) of the abdominal blood vessels. In such cases there may also be enlargement of the spleen.

The classic sign of urogenital schistosomiasis is haematuria (blood in urine). Fibrosis of the bladder and ureter, and kidney damage are sometimes diagnosed in advanced cases. Bladder cancer is another possible complication in the later stages. In women, urogenital schistosomiasis may present with genital lesions, vaginal bleeding, pain during sexual intercourse, and nodules in the vulva. In men, urogenital schistosomiasis can induce pathology of the seminal vesicles, prostate, and other organs including other long-term irreversible consequences, such as infertility.

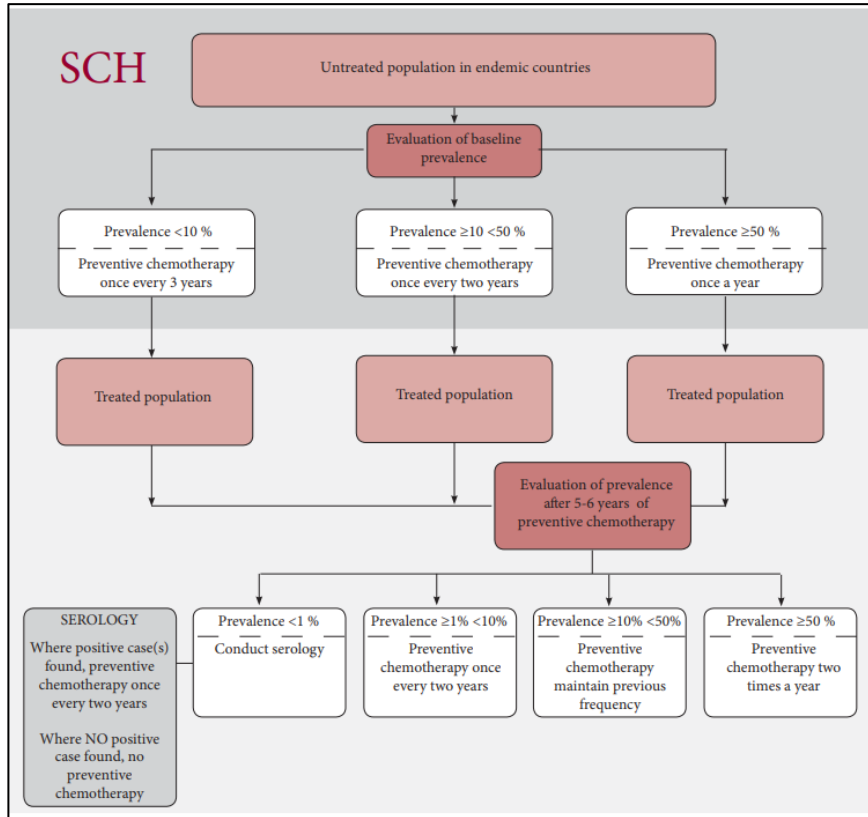
Schistosomiasis has considerable economic and health effects and the disease disables more than it kills. Chronic schistosomiasis may affect people's ability to work and in some cases can result in death. In children, schistosomiasis can cause anaemia, stunting and a reduced ability to learn, though the effects are usually reversible with treatment. The number of deaths due to schistosomiasis is difficult to estimate because of hidden pathologies such as liver and kidney failure, bladder cancer and ectopic pregnancies due to female genital schistosomiasis.

In Zambia, schistosomiasis is endemic in all but two districts with prevalence across the country ranging from less than 1% in Ndola to 88.58% in Kafue district. It is estimated that almost 4 million people are infected with Schistosomiasis in the country.

In 2005, the Ministry of Health in partnership with the Ministry of Education introduced a Schistosomiasis control programme by beginning mass drug administration (MDA) in several provinces. Prevalence mapping was later conducted between 2012-2013 using Kato kats and urine filtration methods.

MASS DRUG ADMINISTRATION

In Zambia, mass drug administration is done using praziquantel according to the WHO guidelines for treatment of schistosomiasis.



Mass drug administration is done primarily in schools targeting school aged children from 5-14 years. In high risk areas above 50% prevalence, government should support the treatment areas. Both school based and community-based treatments are directly observed by the teacher or community drug distributor.

Monitoring and Evaluation

Baseline surveys were carried out in 2013, 2015 and 2018 prior to MDA and showed a significant decline

in prevalence since the mapping took place.

A coverage survey was conducted in 2015 and showed coverage above the WHO recommendation of 75% for SAC but less than 75% in adults (62.2%) across the majority of districts treated.

The impact survey was conducted in Luaska province in the three districts (Choongwe, Kafue, Lusaka) and results are yet to be published.

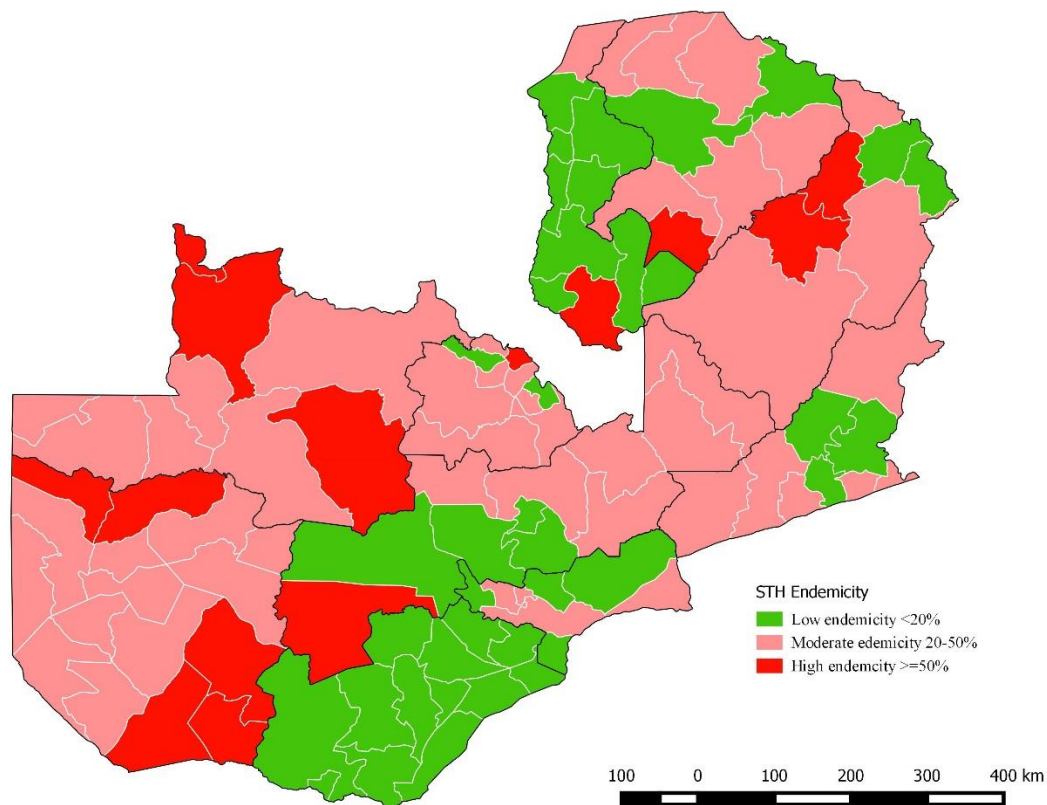


Figure 11: Soil Transmitted Helminthiasis - Endemicity / Risk Categories and Population by Implementation Unit

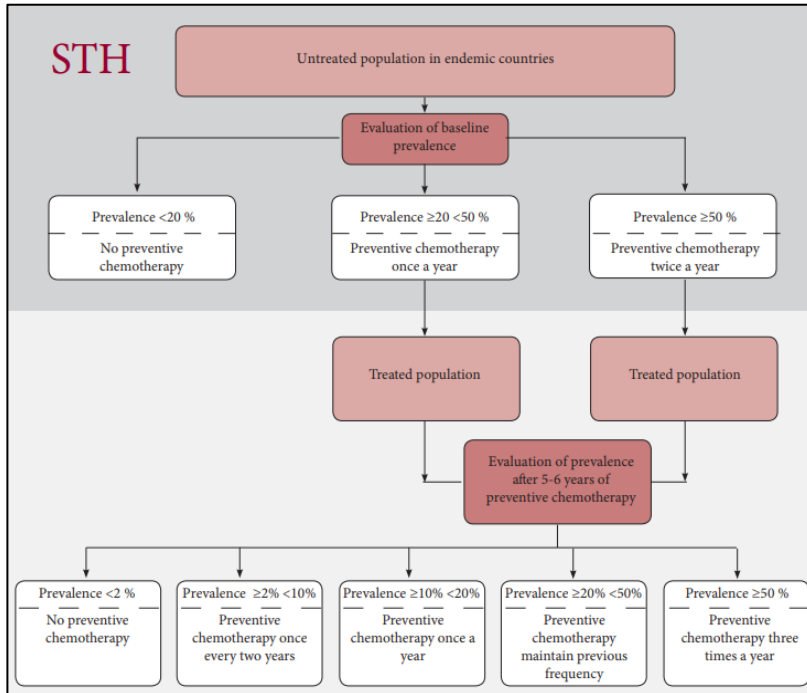
Background

STH is a helminth infection (helminthiasis) caused by three species, namely ascariasis, hookworm and whipworm. Hookworm is caused through contaminated soil, while ascariasis and whipworm are as a result of proper hygiene.

In Zambia, over 1.8 million people are infected with STH, with prevalence ranging from 0.84% to 54.56%. STHs are endemic in all districts in the country. Mapping was done between 2012-2013.

Mass Drug Administration

Mass drug administration for STH is integrated into LF and SCH MDA implementation. STH treatment is also integrated in the mainstream primary health care services and is done during Child Health weeks that take place twice a year.

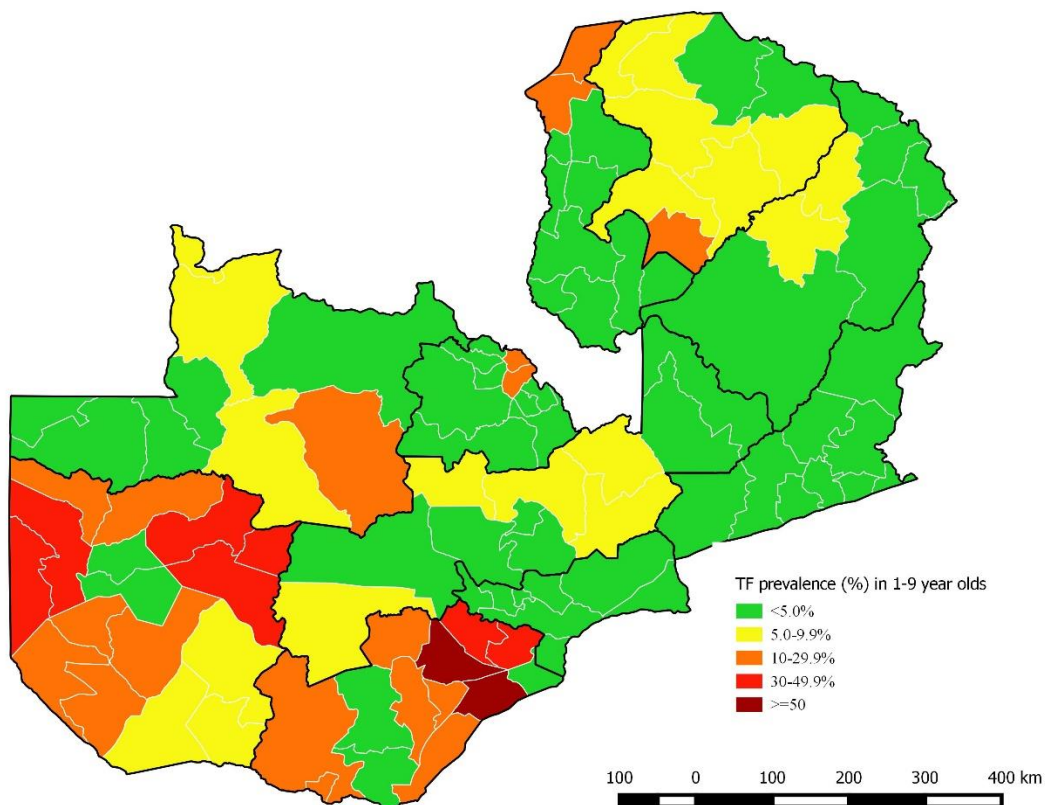


Monitoring and Evaluation

Currently STHs are not being regularly assessed and will need to be reviewed in future surveys.

1.3.1.3. **TRACHOMA**
Figure 12: Trachoma - Endemicity

/ Risk Categories and Population by Implementation Unit in Zambia



Background

It is caused by an obligate intracellular bacterium called *Chlamydia trachomatis* and is earmarked for elimination by the year 2020.

The infection is transmitted through contact with eye and nose discharge of infected people, particularly young children who are the principal reservoir of infection. With repeated re-infection, inflammation eventually results in scarring of the tarsal conjunctiva and inward turning of the eye lashes that irritate the cornea subsequently resulting in cornea opacity and cornea perforation. The main vector for spread from one person to another is the face seeking common house fly.

Zambia has adopted the WHO SAFE strategy which consists of eyelid surgery conducted for persons that have reached the blinding stage of trachoma. Antibiotics(MDA) to treat communities pool of infection and advocacy for facial cleanliness and environmental improvement in community and school setups.

Mass Drug Administration

The first MDA for Trachoma in Zambia was conducted in the year 2012 using azithromycin that was donated by Pfizer. The drug is in both tablet and oral suspension form. Children below the age of six months and expecting mothers were given tetracycline eye ointment (TEO) instead.

The MDAs is carried out through the use of door to door distribution which is done by volunteer community drug distributors. A static service is also set up for people to walk in and access the drugs

- 33 districts have halted treatment for trachoma.
- 15 districts require at least one round of MDA. In 2019, 19 districts will implement MDA, 9 in 2020 and 7 in 2021.

Table 1. Number of districts by MDA rounds remaining

MDA Rounds remaining	Number of districts*
1	10
2	2
3	7
Total	19

The last MDA is projected to be in 2021 in seven districts, implying that last impact and surveillance surveys will be done in 2022 and 24 respectively. The MDAs is carried out through the use of door to door distribution which is done by volunteering community drug distributors. A static service is also set up for people to walk in and access the drugs

Monitoring and Evaluation

- Baseline surveys were carried out in 103 districts between 2006-2018 (see results in excel attached)
- Six districts were re-mapped in 2018 after initial results were nullified.

- Overall, 45 districts qualified for MDA according to WHO MDA interventions thresholds (districts with TF prevalence <4.9% does not require MDA, whereas districts with TF prevalence of 5-9.9%, 10-29.9% and 30+%, require one, three and Five rounds of MDA respectively).
- TT survey results were available for districts surveyed 2015-2018. Generally, TT prevalence was low, highest being at 0.48%.

Impact and surveillance plan

- Impact surveys are carried out after implementing recommended effective rounds of MDA. The aim is to check whether MDA should be stopped. Surveillance surveys are done two years after stopping MDA.
- Twenty-seven districts have been surveyed for Impact surveys (2015-2018).
- Two districts have done surveillance survey.
- 12 districts have results above threshold for stopping MDA. The districts were recommended for more rounds of MDA.

Table 2. Impact and surveillance surveys Plans from 2015-2024

Year	Surveys type	
	Impact	Surveillance
2015*	1 (4*)	0
2016	0	0
2017**	5 (8*)	1 (2*)
2018	11 (17*)	0
2019	14	5
2020	5	11
2021	2	14
2022	7	5
2023	0	2
2024	0	7
Total	45	45

*Total number of districts surveyed.

Note. The plan is based on assumption that all districts will pass impact and surveillance survey

Recommendation

- Engaging with ORBIS to retrieve treatment data from 20012-2014.
- Getting impact survey data for Nchelenge districts
- TT surgeries data by district over time
- Plan MDA in 15 districts (2019), 9 districts (2020) and 7 districts (2021).
- Plan for surveillance and impact surveys as indicated in table 2 above.

Case management

Management of trichiasis surgery commences at community level. Community volunteers are trained as case finders who go out to identify the cases. Once they complete case finding in their areas, they inform a trained surgeon who comes to confirm the cases and conducts the surgery. Thereafter, the patients are reviewed periodically to assess outcomes. The current country back log stands at 2656 and the biggest burden is in southern and western provinces.

Leprosy

Action focal point

Cystecocosis

Action focal point

HAT

Human African Trypanosomiasis commonly known as sleeping sickness is caused by an infection, with a parasite transmitted to human through the bite of infected tsetse flies. The human disease takes two forms, depending on the species of trypanosome involved. *Trypanosoma brucei gambiense* causes a chronic infection while that of *Trypanosoma brucei rhodesiense* causes an acute form. In Zambia, we have the acute form caused by *Trypanosoma brucei rhodesiense*.

Human African Trypanosomiasis in Zambia continues to be reported in the rural populations especially those in National parks and Game Management Areas. The occurrence of the disease in the remote rural populations compounded with limited diagnostic services and the similarity of signs and symptoms to that of malaria are factors that lead to delayed identification of the disease. Resulting in most cases of sleeping sickness identified in the second stage where prognosis is often poor.

It is against this background that the Zambian Government through the Ministry of Health in conjunction with WHO Country Offices periodically carries out support supervision to Sleeping sickness endemic areas to sensitize clinicians, pharmacists and laboratory personnel in order to increase their index of suspicion for sleeping sickness and improve diagnosis and treatment. The activity also helps to collect and update the Country Register for HATs that is used in the WHO Atlas for African Human Trypanosomiasis.

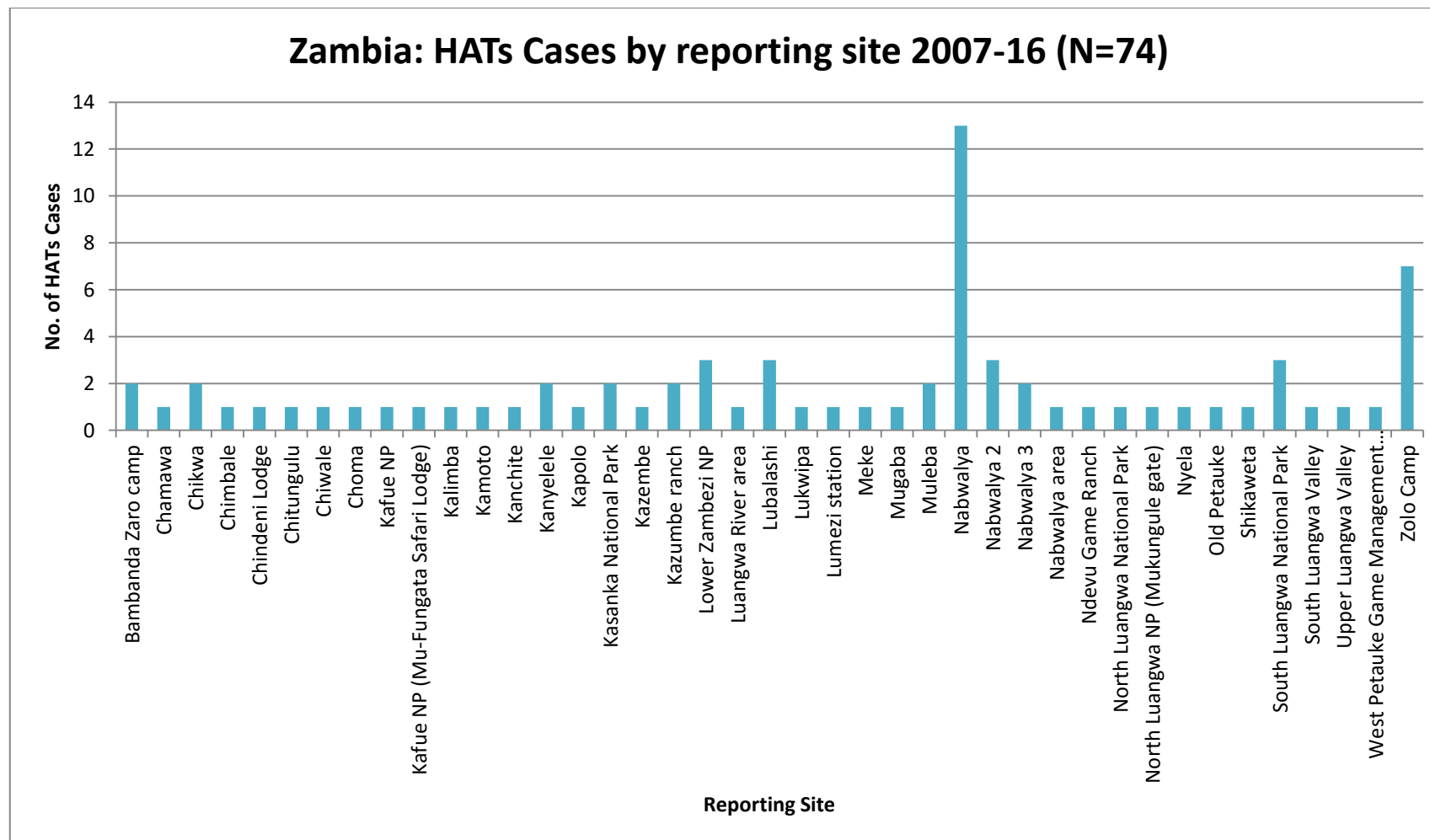
This undertaking is in line with the WHO NTD elimination of Human African Trypanosomiasis as a public health problem by 2020. Among the key strategies for elimination of sleeping sickness is early diagnosis and treatment aimed at reducing the often fatal prognosis when the disease is identified late.

The table below shows number of HATs reporting sites by province and districts, important to note is that 33 sites have not been presented in terms of province and district.

Province	Districts						Total
	Chama	Lundazi	Mpika	Mumbwa	Rufunsa	Unknown	
Central				2			2

Eastern		1					1
Lusaka					1		1
Northern			4				4
(blank)	1					33	34
Grand Total	1	1	4	2	1	33	42

The chart below shows the number of HATs in Zambia from 2007 to 2016 by reporting site.



1.3.2. NTD PROGRAMME IMPLEMENTATION

The NTD programme is currently supported by various partners and the primary NTD programmes are as seen above in section 1.3.1. The table below outlines the key partners and targets.

Table 3: Summary of intervention information on existing PCT programme

NTD	Date programme started	Total districts targeted to date	No. of districts covered (geographical coverage)	Total population in target district	No. (%) covered	Key strategies used	Key partners
Cysterceciosis							
LF	2003	87	87 (100%)	11,568,715	100%	MDA, behaviour change	LSTM
SCH	2005	101	100%	8,756,373	8,756,373 (100%)	MDA	SCI
STH	2013	47	72%	1,660,486	100%	MDA	LSTM, SCI
TRA	2012	36	74%	6,639,680	4,997,248	MDA, behaviour change, surgery	sightsavers, LAN, Orbis OEU

- *Geographical coverage = $\frac{\text{No. of districts covered by the programme}}{\text{Total no. of endemic districts in the country}}$
- Total no. of endemic districts in the country

Table 4: Summary of intervention information on existing CM programmes

NTD	Date programme started	Total districts targeted	No. of districts covered (geographical coverage)	(%) covered	key strategies used	key partners
HAT						
LF	2015	87	87	0	Identifying case numbers(non clinically verified).	LSTM,END FUND,
Tracoma	2012				Door to door case finding, Outreach and Static	Sight Savers, ADRA,Lions Aid Norway, Operation Eye Sight Norway, Geneva Global, ORBIS
Leprosy						

1.3.3. GAPS AND PRIORITIES

The table below is SWOT Analysis, based on the following New Strategic Priorities for elimination of NTD:

- **Ensure universal access to NTD chemotherapy**
- **Accelerate efforts towards environmental and vector control**
- **Harness Research and Innovations towards the attainment of NTD-free status, Transform**
- **NTD Surveillance into a Core Intervention and Strengthening the Resource Mobilization**
- **Coordination and Inter-sectoral Collaboration for the Elimination of NTDs**

Table 5: SWOT Analysis of NTD Programme

STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
Ensure universal access to NTD Chemotherapy					
<ul style="list-style-type: none"> • Teachers, volunteers and health workers trained in MDA/PCT-NTDs • Good drug distribution by Medical Stores Limited (MSL) • Availability of pharmac 	<ul style="list-style-type: none"> • Inadequate Financial support to CDDs during MDA implementation • Frequent delay in drug distribution by MSL • Low coverage in SCH programme 	<ul style="list-style-type: none"> • Existence of stakeholders at local level to enhance financial resource mobilization • Existence of NTD steering Committee • Review target population for SCH MDA implementation 	<ul style="list-style-type: none"> • Provision of NTD drugs by the international community • Existence of the national MSL and Provincial Hubs • Williness of Community members and teachers to participate in MDA implementation • Existence of a pharmacovigilancy system and Pharmaceutical Act • Known NTD endemicity/prevalency by districts 	<ul style="list-style-type: none"> • Cross border movement and influx of refugees 	<ul style="list-style-type: none"> • Existence of MoU on Cross border activities on health

STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
<ul style="list-style-type: none"> o- vigilance system and pharmaceutical act • Mapping for most NTDs done • Good Coverage for MDAs • NTD Programme in place • Existence of Partner support • Existence of Political will 	<ul style="list-style-type: none"> • No designated focal point persons for NTDs at Prvincial/ district level • Inadequate transport during MDA implementation • Long distances between communities especially in rural areas (hard to reach) • Delayed release of funds for MDA implementation 	<ul style="list-style-type: none"> • Existence of NTD Focal point persons at Provincial Level • Existence of stakeholders at local level to support transport mobilization • Existence of bicycles provided to other programmes • Timely planning for early release of funds by donors 	<ul style="list-style-type: none"> • Existence of the parliamentally committee on health • Availability of NTD guidelines • Existence of School health and Nutrition (SHN) in the Ministry of General Education 		

STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
	<ul style="list-style-type: none"> • Non-existence of Reverse Logistics for NTD Drugs 	<ul style="list-style-type: none"> • Existence of pharmacist/Technologists up to Health facility level 			
STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
Ensure universal access to NTD Chemotherapy					
<ul style="list-style-type: none"> • Teachers, volunteers and health workers trained in MDA/PCT-NTDs • Good drug distribution by Medical Stores Limited 	<ul style="list-style-type: none"> • Inadequate Financial support to CDDs during MDA implementation • Frequent delay in drug distribution by MSL • Low 	<ul style="list-style-type: none"> • Existence of stakeholders at local level to enhance financial resource mobilization • Existence of NTD steering Committee • Review target 	<ul style="list-style-type: none"> • Provision of NTD drugs by the international community • Existence of the national MSL and Provincial Hubs • Williness of Community members and teachers to participate in MDA implementation • Existence of a pharmacovigilance system and Pharmaceutical Act 	<ul style="list-style-type: none"> • Cross border movement and influx of refugees 	<ul style="list-style-type: none"> • Existence of MoU on Cross border activities on health

STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
<p>(MSL)</p> <ul style="list-style-type: none"> • Availability of pharmacovigilance system and pharmaceutical act • Mapping for most NTDs done • Good Coverage for MDAs • NTD Programme in place • Existence of Partner support • Existence of Political will 	<p>coverage in SCH programme</p> <ul style="list-style-type: none"> • No designated focal point persons for NTDs at Prvincial/district level • Inadequate transport during MDA implementation • Long distances between communities especially in rural areas (hard to reach) • Delayed 	<p>population for SCH MDA implementation</p> <ul style="list-style-type: none"> • Existence of NTD Focal point persons at Provincial Level • Existence of stakeholders at local level to support transport mobilization • Existence of bicycles provided to other programmes • Timely planning for early release of 	<ul style="list-style-type: none"> • Known NTD endemicity/prevalency by districts • Existence of the parliamentally committee on health • Availability of NTD guidelines • Existence of School health and Nutrition (SHN) in the Ministry of General Education 		

STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
	<ul style="list-style-type: none"> • Non-existence of Reverse Logistics for NTD Drugs 	<ul style="list-style-type: none"> • Existence of pharmacist/Techonologists up to Health facility level 			
STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
Accelate efforts towards environmental and vector control and haness research and innovation towards attainment of NTD Free Status					
<ul style="list-style-type: none"> • Provision of ITNs country wide • Provision of Indoor Residual Spray • Existence of a contract between MoH and Human Antirabies vaccine manufacturin 	<ul style="list-style-type: none"> • Lack of environmental control for snails • Inadquate sanitary facilities • Lack of clean and safe water • Non existence of 	<ul style="list-style-type: none"> • Availability of Human Anti-rabies vaccine • Existence of National Malaria Elimination Centre under MoH • Awareness of the existence of NTDs • 	<ul style="list-style-type: none"> • One Health Approach • Existence of collaboration mechanisms between Ministry of Health and Ministry of Fisheries and Livestock • Existence of the NTDs steering committee 	<ul style="list-style-type: none"> • Human encroachment in animal habitats • Increased population and food demand 	<ul style="list-style-type: none"> • Law enforcement by government on human animal conflict prevention

STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
<p>g supplier</p> <ul style="list-style-type: none"> Existence of research institutions such as university, Zambia national research institute etc Availability of Partners in WASH 	<p>vector control beyond malaria</p> <ul style="list-style-type: none"> Lack of entomologist and malacologists Non-enforcement of by-laws governing dog ownership Research priorities by the research institutions. 				

STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
SP 4: Strengthening Resource Mobilization, Coordination and intersectoral collaboration for the elimination of NTDs					

STRENGTHS	WEAKNESSES	Strengths counteracting weaknesses	OPPORTUNITIES	THREATS	Opportunities counteracting threats
<ul style="list-style-type: none"> • Existence of cooperating partners funding NTD program • Existence of NTD Steering Committee • Existence of NTD coordination mechanism in the MoH • Introduction National Health Insurance • Existence of 7th national development plan 	<ul style="list-style-type: none"> • Limited cooperating partners funding NTD Program • Poor attendance of key partners in NTD programming • Limited collaboration with academia and research institutions 	<ul style="list-style-type: none"> • Advocacy for more partner involvement in NTD activities • Existence of Public Private Partnership • Existence of the Parliament committee on Health 	<ul style="list-style-type: none"> • Inclusion of NTD in the National Health Strategic Plan • Good working relations with government and cooperating partners • Existence of Academia and research Institutions • One Health approach • Existence of the London Declaration on the Elimination of NTDs • Existence sustainable development goal 3.3 	<ul style="list-style-type: none"> • Limited funding and lack of interest in vector control activities • Lack of data on magnitude of NTDs 	<ul style="list-style-type: none"> •

DRAFT

PART 2

2. NTD STRATEGIC AGENDA

The NTD Master plan 2019-23 is in line with the AFRO NTD Strategic Plan. Zambia intends to achieve the NTD control and elimination by 2023 and sustain the elimination status thereafter. The goals of disease specific programmes target elimination of NTDs as a public health problem in Zambia

2.1. Overall NTD Programme Mission and Goals

Mission

- To ensure implementation of an integrated strategy to eliminate and control neglected tropical diseases in Zambia.

Vision

- To have an NTD free Zambia

Strategic Goal

- Accelerate elimination of targeted NTDs and contribute to poverty alleviation, increased productivity and better quality of life for the people of Zambia

Specific Outcome Objectives

- To Accelerate elimination of targeted NTDs and contribute to poverty alleviation, increased productivity and better quality of life of the people in Zambia

The specific objectives of the programme are:

1. To eliminate lymphatic filariasis, schistosomiasis, soil-transmitted helminthiasis, Human African trypanosomiasis, leprosy, and blinding trachoma by 2030.
2. To control morbidity due to snakebite and rabies
3. To prevent disabilities due to lymphatic filariasis, schistosomiasis and blinding trachoma.
4. To sustain the elimination of leprosy and further reduce severe leprosy disability
5. To determine the burden and control of cysticercosis/taeniasis and onchocerciasis

2.2. Guiding Principles and Strategic Priorities

The NTD programme brings together a number of NTD specific programmes and shall maintain the disease specific goals, objectives, strategies and targets. With an integrated package the programme will be more cost effective and sustainable.

The table below summarizes the Strategic priorities and strategic objectives for the NTD programmes

Table 6: Strategic agenda framework

Strategic Priority (Pillar)	Strategic objectives
SP1 : Ensure universal access to NTD chemotherapy	<ol style="list-style-type: none"> 1. Strengthen capacity at national, provincial and district levels for NTD programme management and implementation 2. Scale up of integrated case-management-based diseases interventions for PC and IDM diseases 3. Ensure adequate and timely availability of quality medicines for all people taking in consideration gender equity 1 4. Enhance advocacy and social mobilization
SP2: Accelerate efforts towards environmental and vector control, and Harness Research and Innovations towards the attainment of NTD-free status	<ol style="list-style-type: none"> 1. Establish integrated vector management for targeted NTDs 2. Strengthen environmental management in support of NTD programmes 3. Support in country operational research for NTD Programmes in collaboration with academia3 4. Strengthen collaboration with other line Ministries (Ministry of Local Government & Housing, Ministry of Water, Sanitation and Environmental determinants, and Ministry of General and Higher Education)
SP3 : Transform NTD Surveillance into a Core Intervention	<ol style="list-style-type: none"> 1. Integrate NTD surveillance and Improve the documentation and reporting in routineD HIS2 2. Strengthen the capacity for NTD surveillance through training of staff at all levels, including communities. 3. Ensure universal access to diagnosis and reporting 4. Enhance Monitoring and Evaluation of the national NTD programmes 5. Strengthen Pharmacovigilance 6. Implement quality assurance and control for NTD medicines
SP4: Strengthening the Resource Mobilization, Coordination and Inter-sectoral Collaboration for the Elimination of NTDs	<ol style="list-style-type: none"> 1. Develop a comprehensive and integrated multiyear Strategic Plan for the elimination of the targeted NTDs ensuring stakeholders engagement 2. Enhance resource mobilization approaches and strategies at national, provincial and district levels for NTD interventions 3. Strengthen the integration and linkages of NTD programme and financial plans into sector – wide and national budgetary and financing mechanisms 4. Strengthen coordination mechanisms for the NTDs control programme at national,

Table 7: Strategic Objectives and activities

Strategic Priority	Strategic Objective	Strategy	Activity	Budget
Ensure universal access to NTD chemotherapy	To strengthen capacity at national, provincial and district levels for NTD programme management and implementation	Capacity building	National <ol style="list-style-type: none"> 1. Development of an NTD Training package 2. Printing of NTD Training package 3. Conduct ToTs 4. Develop National NTD Guidelines 5. Print National NTD Guidelines 6. Disseminate NTD Guidelines 7. Attend International meeting on NTD management 8. On site mentorship 9. Technical Support Supervision 	Costs per item & total for each session Etc..
Ensure universal access to NTD chemotherapy	To raise awareness/profile of NTDs	<ol style="list-style-type: none"> 1. Advocacy 2. Health promotion <ul style="list-style-type: none"> • Health education 	Engage: <ul style="list-style-type: none"> • Political Leader • Traditional Leaders • Civic Leaders • Religious Leader • Electronic • Radio • TV • Print media • Drama performances • Interpersonal communication • Community/stakeholder engagement • IEC Materials (Posters, fliers, leaflets, Job Aids) • Behavior change communication 	Costs per item & total for each session Etc..

Strategic Priority	Strategic Objective	Strategy	Activity	Budget
SP 1: Ensure universal access to NTD chemotherapy	To ensure adequate and timely availability of quality medicines	<ol style="list-style-type: none"> 1. Target setting and Quantification 2. Procurement 3. Logistics and Supply Chain 	<ol style="list-style-type: none"> 1.1 Hold consultative meeting on NTD Population target setting 2.1 Filling in of the Joint Application Package 3.1 Distribution of MDA Drugs 3.2 Conducting of MDAs 	Costs per item & total for each session Etc..
Ensure universal access to NTD chemotherapy	To scale up integrated case-management-based diseases interventions for PC and IDM diseases	<p>Case identification and management</p> <p>Ensure timely application for all NTD drug requests</p>	<p>Mapping for LF morbidity</p> <p>Training of health workers on case management</p> <p>Door to door case identification and Health Center identification (Trachoma)</p> <p>Conducting of reverse logistics</p> <p>Updating of eligible populations</p> <p>Timely distribution of drugs for MDAs</p> <p>Conducting NTD drug audits</p> <p>Develop guidelines for NTD programme management</p>	Costs per item & total for each session Etc..
	social mobilization			
SP2: Accelerate efforts towards environmental and vector	Establish integrated vector management for targeted NTDs	Establish and strengthen linkages with other stakeholders (MoU)	<ol style="list-style-type: none"> 1. Hold consultative meetings with stake holders to: Accelerate efforts towards environmental and 	Costs per item & total for each

Strategic Priority	Strategic Objective	Strategy	Activity	Budget
control,			vector control, and Harness Research and Innovations towards the attainment of NTD-free status <ul style="list-style-type: none"> • LF – Engage with the National Malaria Elimination center on programming and data sharing • Engage the National Reserch Authority • Engage the Environmental Unit at MOH in 2. Incomparate stakeholders in Technical working groups 3. Ministry of Local Government and Ministry of Education. <ul style="list-style-type: none"> • Trachoma - - Engage with Ministry of Water, Sanitation and Environmental Determinants, Ministry of Local Government and Ministry of Education • Ministry of Chiefs and Traditional Affairs 	session Etc..
Harness Research and Innovations towards the attainment of NTD-free status			<ul style="list-style-type: none"> • Engage with various research institutions on research 	
SP3Transform NTD Surveillance	To integrate NTD surveillance and Improve the	Develop NTD indicators	Integrate the new NTD indicators into the DHSI2 Conduct training on NTD	Costs per item &

Strategic Priority	Strategic Objective	Strategy	Activity	Budget
into a Core Intervention	documentation and reporting in routine D HIS2		DHIS2 indicators	total for each session Etc..
	Strengthen the capacity for NTD surveillance through training of staff at all levels, including communities.	Develop Training manual for NTD surveillance	Integrate surveillance activities with those of the disease surveillance officers Conduct 2 Trainer of trainers(TOT) for NTD surveillance 115 Cascade trainings at all levels	
	Strengthen Pharmacovigilance	Develop training guidelines for pharmacovigilance	Conduct 2 TOT pharmacovigilance 115 Cascade trainings at all levels	
	Ensure universal access to diagnosis and reporting	Advocacy for universal access on NTDs	Develop IEC materials and messages for NTDs Media plan to create awareness	
	Implement quality assurance and control for NTD medicines	Develop quality assurance indicators for NTD medicines	Integrate indicators in DHIS2 Develop SOPs Orient pharmacists on SOPs	
	Enhance Monitoring and Evaluation of the national NTD programmes	Ensure all NTD indicators are integrated in the MOH M&E platform Regularly update the NTD portal	Have a designated M&E NTD officer Include NTDs indicators in HMIS Conduct survey for NTDs indicators	
SP4: Strengthening Planning, Resource Mobilization, Coordination and Inter-sectoral Collaboration for the Elimination of NTDs	Develop a comprehensive and integrated multiyear Strategic Plan for the elimination of the targeted NTDs ensuring stakeholders engagement	Stakeholder mapping	<ul style="list-style-type: none"> Hold Stakeholder planning meetings for NTDs Develop terms of reference for steering committee and technical working group Hold quarterly Steering committee Print master plan and 2019 annual plan 	Costs per item & total for each session Etc..
	Strengthen the integration and	To ensure the NTD budget line is integrated in the	Develop the NTD budget and have it submitted to the main health sector budget	

Strategic Priority	Strategic Objective	Strategy	Activity	Budget
	linkages of NTD programme and financial plans into sector – wide and national budgetary and financing mechanisms	main health sector budget		
	Strengthen coordination mechanisms for the NTDs control programme at national, provincial and district levels	Steering committee to be inclusive of all key stakeholders	Stakeholder mapping	
	Enhance resource mobilization approaches and strategies at national, provincial and district levels for NTD interventions	Advocate for increased allocation of funds for NTDs	Stakeholder mapping of would be funders Engage would be funders during planning meeting Review/update MoU with partners on NTDs	

2.3. Global NTD Programme Objectives and Strategies

Table 8: Programme Summary components of WHO recommended Strategies for the control of Endemic NTDs

NTD	GLOBAL GOAL	NATIONAL GOALS	OBJECTIVES	INTERVENTIONS	DELIVERY CHANNELS	TARGET POPN
Schistosomiasis	To Eliminate Schistosomiasis by the year 2025	<ul style="list-style-type: none"> ▪ To achieve 100% geographic coverage by 2018 for SCH MDA. ▪ To achieve 75% therapeutic coverage by 2020 ▪ To eliminate high intensity of Schistosomiasis in school age children & communities at risk. ▪ Work up a strategy to look at Schistosomiasis vector control. 	<ul style="list-style-type: none"> ▪ To reduce morbidity of Schistosomiasis to a level where it is no longer a public health problem 	<ul style="list-style-type: none"> ▪ Mass Drug Administration ▪ Health education and promotion of behavioural change ▪ Environmental management ▪ Vector control 	<ul style="list-style-type: none"> ▪ Schools and communities in high risk areas ▪ Community-based campaigns behavioural change ▪ Environmental manipulation ▪ Improvement in water supply and sanitation 	75-100% of all school age children at risk
Soil Transmitted Helminths	To have 50% of preschool and school age children treated in 100% countries by 2015 and 75% by 2020	<ul style="list-style-type: none"> ▪ To achieve 100% geographic coverage in all mapped areas by 2018 ▪ To achieve 75% therapeutic coverage by 2020 ▪ To eliminate high intensity of Soil transmitted helminthes in 	<ul style="list-style-type: none"> ▪ To reduce morbidity of STH to a level where it is no longer a public health problem ▪ To reach all those requiring treatment ▪ To reduce the prevalence of STH to less than 10% 	<ul style="list-style-type: none"> ▪ MDA with Albendazole /Mebendazole ▪ Health education and promotion of behavioural change 	<ul style="list-style-type: none"> ▪ Schools & communities in high risk areas ▪ Community-based campaigns behavioural change ▪ Improvement in water supply and sanitation 	75-100% of all school age children at risk

NTD	GLOBAL GOAL	NATIONAL GOALS	OBJECTIVES	INTERVENTIONS	DELIVERY CHANNELS	TARGET POPN
		<p>school age and communities at risk.</p> <ul style="list-style-type: none"> Work with other MoH departments to achieve the revised treatment regime recommended by WHO 2017. Namely to treat all women of child bearing age in endemic areas over 20% endemicity. GAP analysis of STH Treatments when LF MDA stops after 5/6 rounds (2019/2020) 				
Lymphaticfil ariasis	<ul style="list-style-type: none"> Elimination of lymphatic filariasis as a public health problem by 2020. 	<ul style="list-style-type: none"> To have a Zambia free of LF by 2020. Alleviate suffering by managing morbidity and preventing further disability. 	<ul style="list-style-type: none"> To interrupt transmission by ensuring >75% MDA coverage in all endemic populations To map LF morbidity in Zambia - development of Morbidity Management Plan for Zambia 	<ul style="list-style-type: none"> Mass drug administration of annual dosage of DEC and Albendazole to all at risk. With possible implementation of triple therapy with the inclusion of Ivermectin. Training for health care staff and 	<ul style="list-style-type: none"> CDI (community directed interventions) Community-based campaigns Residual spraying (outdoor and indoor) Mobile camps/home based care behavioural change 	<p>Whole communities in endemic areas</p> <p>Patients with LF Morbidity.</p>

NTD	GLOBAL GOAL	NATIONAL GOALS	OBJECTIVES	INTERVENTIONS	DELIVERY CHANNELS	TARGET POPN
			<ul style="list-style-type: none"> ▪ Control disease through vector control. ▪ Raise LF awareness in Zambian communities 	<ul style="list-style-type: none"> carers on morbidity management as detailed in the Morbidity Management Plan. ▪ Surgery (if hydroceles are found) ▪ Morbidity management for Lymphoedema patients ▪ Vector control. ▪ Health education and promotion of behavioural change, personal hygiene & exercise. 		
4. Trachoma	Eliminate Trachoma by the year 2020	To map the whole country by 2015. Eliminate Trachoma by the year 2020.	<ul style="list-style-type: none"> ▪ To control blinding trachoma through the SAFE strategy ▪ To complete the mapping of the affected areas by 2009. ▪ To reduce the prevalence of 	<ul style="list-style-type: none"> ▪ Mass Drug Administration with Azithromycin of entire area. ▪ Health education and promotion of behavioural change 	<p>CDI (community directed interventions)</p> <ul style="list-style-type: none"> ▪ Community-based campaigns behavioural change ▪ School education 	<p>Patients with trichiasis</p> <p>All communities in endemic districts</p>

NTD	GLOBAL GOAL	NATIONAL GOALS	OBJECTIVES	INTERVENTIONS	DELIVERY CHANNELS	TARGET POPN
			<p>Trichiasis trachoma in surveyed districts by 80% by 2015.</p> <ul style="list-style-type: none"> Reduction of active trachoma by ensuring >80% coverage through mass treatment with Zithromax by year 2015 	<ul style="list-style-type: none"> Trichiasis surgery for all endemic communities. Improved water supply for personal hygiene Personal hygiene reinforcing face washing 	<ul style="list-style-type: none"> Facility based & mobile camps surgeries 	
5. Taeniosis/ Cystercecosis (TC)	<p>Validated strategy for control and elimination available by 2015.</p> <p>Intervention scaled by 2020</p>	<ul style="list-style-type: none"> Mapping to be done by 2015 Control of taeniosis by 2020 	<ul style="list-style-type: none"> To reduce prevalence of TC by 80% by detection and treatment of human tapeworm carriers by 2015 	<ul style="list-style-type: none"> Health education and promotion of behavioural change. Mass treatment of whole population in high endemic areas with praziquantel or niclosamide 	<ul style="list-style-type: none"> Facility based treatment Campaigns Animal vaccination 	All communities in endemic districts
6. Human African Trypanosomosis (HAT)	Elimination by 2015	<ul style="list-style-type: none"> Reduce morbidity and mortality attributed to sleeping sickness 	<ul style="list-style-type: none"> Control of HAT 	<ul style="list-style-type: none"> Finding and treatment of infected patients with suramin or melarsoprol Control activities in animal host/reservoir Vector control 	<ul style="list-style-type: none"> Facility based treatment Campaigns Tse-Tse Traps 	Communities in endemic areas

NTD	GLOBAL GOAL	NATIONAL GOALS	OBJECTIVES	INTERVENTIONS	DELIVERY CHANNELS	TARGET POPN
7. Leprosy elimination	Leprosy elimination by 2020	<ul style="list-style-type: none"> Provide access to quality leprosy services for all affected communities following the principles of equity and social justice 	To reduce leprosy morbidity to 1/10,000	<ul style="list-style-type: none"> Early case finding and treatment with multi drug therapy (MDT) Palliative care Health Education 	<ul style="list-style-type: none"> Passive & active case finding and treatment in facilities Home based care Campaigns 	100% of all those affected by leprosy

2.4. National NTD Milestones

The following tables provide milestones for each of the NTD diseases.

Table 7: LF Elimination Milestones

Indicators	2018	2019	2020	2021	2022	2023
1. Completed mapping of LF and determined LF endemic areas and the population at risk	100%					
2. Begun implementation of LF MDA in districts requiring LF MDA including loiasis co-endemic areas	100%					
3. Achieving 100% geographical coverage in LF endemic districts	100%					
4. Major urban areas with evidence of LF transmission under adequate MDA (Regional/State coverage more than 65%)	100 %					
5. Conducted more than 5 rounds of MDA in all endemic lus with regional/state coverage more than 65% and stopped MDA in at least 50% of LF endemic lus under WHO criteria	90 %	100%				
6. Conducted first TAS activities in at least 50% of LF endemic lus after at least 5 rounds of MDA	0 %		100%			
7. Conducted and passed at least 2 TAS activities in at least 75% of lus	0 %				100%	
8. Started passive surveillance and vector control activities in at least 75% of lus	0 %					

9. Present "the dossier" for in country verification of absence of LF transmission	0%		
10. Proportion and number of IUs where there is full coverage of morbidity-management services and access to basic care	0%	50%	50%
11. Proportion and number of IUs where 75% of hydrocele cases benefitted from appropriate surgery	0%		100%

Table 8: SCH Elimination Milestones

Indicators	2018	2019	2020	2021	2022	2023
1. Completed mapping of SCH and determined areas above intervention thresholds and the endemic populations	100%					
2. Begun implementation of school-based/community based treatments in Endemic districts	100%					
3. Achieving 100% geographical coverage in SCH endemic districts	100%					
4. Conducted 3-5 years of consecutive treatments in all endemic districts with coverage more than 75%	45%	65%	85%	100%		
5. Conducted first impact assessment activities in at least 50% of SCH endemic districts after at least 3 years of consecutive treatments	0%	0%	10%	30%	40%	50%
6. Endemic districts achieving moderate morbidity control	0%	10%	50%	75%	100%	
7. Endemic districts achieving advanced morbidity control	0%	10%	50%	75%	100%	
8. Endemic districts achieving elimination of transmission	0%	0%	10%	25%	45%	65%

Table 9: STH Elimination Milestones

Indicators	2018	2019	2020	2021	2022	2023
1. Completed mapping of STH and determined areas above intervention thresholds and the endemic populations	100%					
2. Begun implementation of school-based/community based treatments in Endemic districts	100%					

3. Achieving 100% geographical coverage in STH endemic districts	100%					
4. Conducted 3-5 years of consecutive treatments in all endemic districts with regional/state coverage more than 75%	100%					
5. Conducted first impact assesment activities in at least 50% of STH endemic districts after at least 3 years of consecutive treatments	100%					
6. Endemic districts achieving moderate morbidity control	0%	10%	50%	75%	100%	
7. Endemic distrits achiving advanced morbidity control	0%	0%	10%	25%	45%	65%

Table 10:Trachoma Elimination Milestones

Indicators	2018	2019	2020	2021	2022	2023
1. Completed mapping of Trachoma and determined areas above intervention thresholds and the target populations	100%					
2. Begun implementation of community based treatments in Endemic districts	100%					
3. Achieving 100% geographical coverage in Trachoma target districts	100%					
4. Conducted 3-5 years of consecutive treatments in all target districts with regional/state coverage more than 75%	80%	100%				
5. Conducted first impact assessment activities in at least 50% of Trachoma target districts after at least 3 rounds of treatments	100%					
6. Started passive surveillance in at least 75% of Ius	100%					
Proportion and number of target districts where there is full coverage of case management services	100%					
	15/15					
8. Target districts achieved elimination of blinding trachoma	7	20	40			

Table 11: IDM Control/Elimination Milestones

Indicators	2018	2019	2020	2021	2022	2023
1. Active case detection in 100% of highly endemic districts						
2. Passive case detection in 100% of other endemic districts						
3. Manage all patients in peripheral health facilities						
4. Refer severe and complicated cases for management at district hospitals and reference centres						
5. Achieved 100% geographical coverage of SAFE in trachoma target districts						
6. Achieved 100% treatment coverage of identified HAT and leprosy cases						
7. Achieved 100% treatment coverage of identified cases for other CM-NTDs						
8. Started passive surveillance in at least 50% of target districts for CM-NTDs targeted for elimination (HAT, Leprosy)						
9. Started sentinel site surveillance in at least 50% of target districts for CM-NTDs targeted for elimination (HAT, Leprosy)						
10. Target districts that sustained elimination of leprosy and achieved elimination of HAT						

Table 12: PHASE Milestones

Indicators	2018	2019	2020	2021	2022	2023
1. Proportion and number of endemic districts with adequate* access to clean water for SCH control						
2. Proportion and number of endemic districts with *adequate sanitation manipulation for SCH control						
3. Proportion and number of endemic districts with *adequate environmental manipulation for SCH control						
4. Proportion and number of endemic districts with *adequate access to clean water and health education for STH control						
5. Proportion and number of endemic districts with *adequate sanitation for SCH control						
6. Proportion and number of endemic districts with *adequate environmental manipulation for STH control						

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PART 3

OPERATIONAL FRAMEWORK

This section describes how the Zambian Health sector will implement the planned activities. It also explains what the country's capacity needs are, how resources will be mobilized, potential risks addressed, and how programme sustainability will be achieved.

Scaling up Access to NTD Interventions, Treatment and Service Delivery Capacity

Scaling up access to NTD treatment is dependent on various interventions which include the following:

- **Ensuring universal access to NTD Preventive chemotherapy**
- **Case management/chronic care;**
- **Transmission control (which includes vector and reservoir control as well as improvements in sanitation, water quality and supply).**

Ensuring universal access to NTD Preventive chemotherapy

Preventive chemotherapy is defined as the large-scale distribution of safe medicines, either alone or in combination, to population groups at risk. It is implemented at regular intervals with an aim to reduce the extensive morbidity associated with selected NTDs and ultimately reduce and interrupt their transmission where possible. Treatment must therefore be provided actively and does not need to be repeated frequently by virtue of the slow disease evolution. Preventive chemotherapy has been the mainstay of control and elimination of most NTDs endemic areas.

There are three modalities by which preventive chemotherapy interventions are implemented:

- **MDA:** When the entire population of an area is administered
- **targeted chemotherapy:** chemotherapy is administered to specific risk groups in the population as defined by age sex, or other social characteristics (for example, school-aged children, fisherman; and
- **selective chemotherapy:** when, as a result of regular screening in a population living in an endemic area, chemotherapy is administered to all individuals found (or suspected) to be infected.

A summary of the contents of this package of activities is presented in Annex 6.4 Depending on the types of diseases targeted and their overlaps there will be variations in types and numbers of the drug combinations distributed at a particular time.

This information is summarized in the algorithms given in the *Preventive chemotherapy manual*. Activities towards ensuring universal access to NTD chemotherapy and Preventive chemotherapy are outlined in Table 15 and 16.

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Table 13: Types of Mass Drug Administrations

Cross cutting MDA type	Delivery channel	Times of treatment	Disease combo	Requirements	Target district list	Other mass control interventions
MDA2 + MDA4 + T1	Community based campaigns + school based campaigns	Week 1, week 3 and month 6	Trachoma, LF, SCH &STH	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	2	EPI campaigns, ITN distribution and retreatment, water and sanitation, health education, environmental manipulation
MDA2 + MDA4+ T1	Community based campaigns + school based campaigns	Week 1, week 3	Trachoma, LF, SCH &STH	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	16	EPI campaigns, ITN distribution and retreatment, water and sanitation, health education, environmental manipulation
MDA2 +T1	Community based campaigns + school based campaigns	Month 1 and month 6	LF, SCH &STH	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	1	EPI campaigns, ITN distribution and retreatment, water and sanitation, health education, environmental manipulation
MDA 2 +T2	Community based campaigns + school based campaigns	Week 1	LF, SCH &STH	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	19	EPI campaigns, ITN distribution and retreatment, water and sanitation, health education, environmental manipulation

Cross cutting MDA type	Delivery channel	Times of treatment	Disease combo	Requirements	Target district list	Other mass control interventions
MDA2 + MDA4 + T2	Community based campaigns + school based campaigns	Month 1	SCH, Trachoma, LF	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	2	ITN distribution and retreatment, water and sanitation, health education, environmental manipulation
MDA2 + MDA4 +T3	Community based campaigns + school based campaigns	Month 1 and month 6	STH, LF, Trachoma	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	1	EPI campaigns, ITN distribution and retreatment, water and sanitation, health education, environmental manipulation
MDA2 + MDA4	Community based campaigns + school based campaigns	Month 1	STH, LF, Trachoma	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	11 (6 are sth endemic and 5 non)	EPI campaigns, ITN distribution and retreatment, water and sanitation, health education, environmental manipulation
MDA2 + MDA4 + T2	Community based campaigns + school based campaigns		SCH. LF Trachoma	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	8	ITN distribution and retreatment, water and sanitation, health education, environmental manipulation
MDA4 + T1 +T3	Community based campaigns + school based campaigns	Month 1 and month 6	SCH, STH Trachoma	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	1	ITN distribution and retreatment, water and sanitation, health education, environmental manipulation

Cross cutting MDA type	Delivery channel	Times of treatment	Disease combo	Requirements	Target district list	Other mass control interventions
MDA4 + T1	Community based campaigns + school based campaigns	Month 1	SCH, STH Trachoma	Production of tools, logistics for drug distribution and management. Trainings of health workers, teachers & CDDs. Social mobilisation, supervision	3	EPI campaigns, ITN distribution and retreatment, water and sanitation, health education, environmental manipulation

- Legend

- MDA1 = Ivermectin + Albendazole T1 = Praziquantel + Albendazole or Praziquantel + mebendazole
- MDA2 = DEC+ Albendazole T2 = Praziquantel only
- MDA3 = Ivermectin only (CDT1) T3 = Albendazole or mebendazole only
- MDA4 = Azithromycin only

Table 14: Activities for strategic priority 1 – Ensure Universal access to NTD chemotherapy

Strategic Objective 1: To strengthen capacity at national, provincial and district levels for NTD programme management and implementation			
Activity	Details (Sub-activities)	Timeframe/Frequency	Resources needed
Development of an NTD Training package	Hold a five days' workshop for 15 people Identify Venue (workshop 5 days)	2 nd quarter 2019	DSA, Fuel/transport refund, Conference package, stationary
Printing of NTD Training package	Printing	2 nd Quarter	Resources for printing
Conduct ToTs	Hold a five days' workshop for 3 people from each province Identify Venue (workshop 5 days)	2 nd quarter	DSA, Fuel/transport refund, Conference package, stationary

Develop National NTD Guidelines	Hold a seven days' workshop for 20 people with all stakeholders represented Identify Venue (workshop 7 days)	3 rd quarter 2019	DSA, Fuel/transport refund, Conference package, stationary
Print National NTD Guidelines	Printing	3 rd quarter	Resources for printing
Disseminate NTD Guidelines	Hold a days meeting to disseminate the NTD guidelines Identify Venue (workshop 7 days). All stakeholders and 2 Provincial officers from all provinces are expected to attend. This meeting will be held in Lusaka	4 th Quarter	DSA, Fuel/transport refund, Conference package, stationary
Attend International meetings on NTD management	Attend an international meeting in NTD management for 5 days	4 th Quarter	Registration, Air ticket, Perdiem, Taxi fare
On site mentorship	Conduct Onsite mentorship in all provinces and districts	Ongoing	DSA, Fuel/transport refund, Lunch allowance
Technical Support Supervision	Conduct TSS to all Provinces and districts	Ongoing	DSA, Fuel/transport refund, lunch allowance
Strategic Objective 2: Enhance advocacy and social mobilization			
Activity	Details (Sub-activities)	Timeframe/Frequency	Resources needed
Engage: <ul style="list-style-type: none"> Political Leader Traditional Leaders Civic Leaders Religious Leader 	Hold a strategic meeting to engage stakeholders and raise awareness and profile for NTDs in the communities	2 nd quarter	DSA, Fuel/transport refund, Conference package, stationary
Electronic	-Engage a mobile phone company to send sms to subscribers to increase awareness on NTDs and MDAs	2 nd quarter Ongoing	Negotiated Subsidised fee for sms transfers No cost

		-Create social media platforms to increase awareness on NTDs and MDAs		
	Radio	Conduct radio shows/ programs to increase awareness on NTDs and MDAs	Ongoing	Pay for airplay time
	TV	Conduct TV shows/ programs to increase awareness on NTDs and MDAs	Ongoing	Pay TV
	Print media	Print fliers, newspapers IEC Materials (Posters, fliers, leaflets, Job Aids), mount billboards and posters to increase awareness on NTDs and MDAs	Ongoing	Pay for print media as per requirement
	Drama performances	Encourage and engage drama performances prior and during MDAs and NTD campaigns to increase awareness	Ongoing	Pay Local drama groups at a standardised set fee
	Interpersonal communication			
Strategic Objective 3: To ensure adequate and timely availability of quality medicines for all people taking in consideration gender equity				
Activity	Details (Sub-activities)		Timeframe/Frequency	Resources needed
Hold consultative meeting on NTD Population target setting	Hold a five-day workshop for 3 people from each province Identify Venue (workshop 5 days) This meeting will facilitate target setting and focused qualification of supplies		2 nd quarter	DSA, Fuel/transport refund, Conference package, stationary
Filling in of the Joint Application Package	Hold a 3-day workshop for 10 people Identify Venue (workshop 3 days)		1 st quarter 2019	DSA, Fuel/transport refund, Conference package, stationary
Distribution of MDA Drug	Drugs to be distributed to the provincial hubs by MSL		Ongoing	Fuel
Conducting of MDAs	Conduct MDAs in all provinces		Ongoing	DSA, Fuel/transport refund, Lunch allowance
Strategic Objective 4: To scale up integrated case-management-based diseases interventions for PC and IDM diseases				
Activity	Details (Sub-activities)		Timeframe/Frequency	Resources needed

Table 15: Activities for strategic priority 2 : Accelerate efforts towards environmental and vector control and harness research and innovations towards the attainment of NTD status

Strategic Objective 1: Support in country operational research for NTD Programmes in collaboration with academia and research institution			
Activity	Details (Sub-activities)	Timeframe/Frequency	Resources needed
Engage with various research institutions on research	Conduct targeted research for NTDs	Ongoing	DSA, Fuel/transport refund, Lunch allowance
	Conduct operational research for NTDs	Ongoing	DSA, Fuel/transport refund, Lunch allowance
Activity	Details (Sub-activities)	Timeframe/Frequency	Resources needed
Strategic Objective 2: Support in country operational research for NTD Programmes in collaboration with academia and research institution			
Engage with various research institutions on research	Conduct targeted research for NTDs	Ongoing	DSA, Fuel/transport refund, Lunch allowance
	Conduct operational research for NTDs	Ongoing	DSA, Fuel/transport refund, Lunch allowance

SP 3: Transform NTD Surveillance into a Core Intervention

Activity	Details (Sub-activities)	Timeframe/ Frequency	Resources needed
Strategic Objective 3:			
Integrate the new NTD indicators into the DHIS2	Develop the NTD indicators for 5days	Quarter 1 2019	venue, stationery, snacks, DSA 15 people
Conduct training on NTD DHIS2 indicators	Hold a 5 day M&E meeting	Quarter 1 2019	venue, stationery, snacks, DSA 20 people
Integrate surveillance activities with those of the disease surveillance officers	Hold consultative meeting with surveillance team for 3days	Quarter 1 2019	venue, stationery, snacks, DSA 15 people
Conduct 2 Trainer of trainers(TOT) for NTD surveillance	Central level TOT for 5days	Quarter 2 2019	venue, stationery, snacks, DSA 30 people
115 Cascade trainings at all levels	Conduct 115cascade trainings at all levels	Quarter 1 and 2	Venue, stationery, snacks, DSA, 30 people
Conduct 2 TOT pharmacovigilance	Hold 2 TOT pharmacovigilance	Quarter 1	Venue, stationery, snacks, DSA, 30 people
115 Cascade trainings at all levels	Conduct 115cascade trainings at all levels	Quarter 1 and 2	Venue, stationery, snacks, DSA, 30 people
Develop IEC materials and messages for NTDs	Conduct a meeting for the development of IEC materials and messages for NTDs for 10 days	Quarter 1	Venue, stationery, snacks, DSA, 20 people
Media plan to create awareness	Conduct a meeting for the formulation of media plan to create awareness for 3 days	Quarter 1	Venue, stationery, snacks, DSA, 20 people
Integrate indicators in DHIS2	Conduct an M&E meeting in DHIS2 for 5 days	Quarter 3	Venue, stationery, snacks, DSA, 20 peopleQuarter

Activity	Details (Sub-activities)	Timeframe/ Frequency	Resources needed
Develop SOPs	Conduct a meeting to develop SOPs for 5days	Quarter 2	Venue, stationery, DSA, snacks, 15 people
Orient pharmacists on SOPs	Orientation meeting on SOPs for 2days	Quarter 2	Venue, stationery, DSA, snacks, 15 peoples
Create position for an NTDs M&E officer	Have a designated M&E NTDs officer	Quarter 1	Finances
Conduct survey for NTDs	Hold surveys for NTDs for 1 month	Quarter 4	Tools, equipments, fuel, DSA, stationery
Activity	Details (Sub-activities)	Timeframe/ Frequency	Resources needed
Strategic Objective 4: Strengthening Planning, Resource Mobilization, Coordination and Inter-sectoral Collaboration for the Elimination of NTDs			
<ul style="list-style-type: none"> Hold Stakeholder planning meetings for NTDs 	<ol style="list-style-type: none"> Stakeholder mapping 1day meeting Quarterly meetings 	2019	Stationery, Fuel, Allowances, Venue
<ul style="list-style-type: none"> Develop terms of reference for steering committee and technical working group 	<ol style="list-style-type: none"> conduct 2 meetings to develop TORs for 2days Adopt multi-media approaches design IEC 	Quarter One 2019	venue, stationery, snacks, DSA 15 people
<ul style="list-style-type: none"> Hold quarterly Steering committee 	<ul style="list-style-type: none"> Conduct Quarterly meetings for 2days 	2019 Quartely	venue, stationery, snacks, DSA/transport refund 30 people
<ul style="list-style-type: none"> Finalise master plan and 2019 annual plan 	<ul style="list-style-type: none"> Print master plan and 2019 annual plan 	4 th quarter 2018	Acquire quotations, select vendor, Print 500 copies

The geographical and therapeutic coverage in 2006, shown in table 6.1, was based on the predictive maps. This was done as a project and Zambia was able to demonstrate that with all the resources available, it is capable of achieving at least 80% therapeutic coverage and 100% geographic coverage of the endemic areas.

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2.6. Scaling up NTD Case Management Interventions

Human African trypanosomiasis (HAT), Cystercercosis/teaniosis, Trachoma and Leprosy are the Case Management diseases identified in Zambia. Leprosy has reached elimination stage in Zambia, and therefore, the programme needs to maintain the elimination status. HAT and Cystercercosis are some of the NTDs that are showing an increasing burden of morbidity and the Ministry has taken effort to map these diseases.

In order to effectively manage cases of HAT, thereby reduce mortality and morbidity due to HAT, in districts affected by the disease, intensified case findings will be conducted periodically in health institutions that are near the National gameparks. HAT control program in Zambia aims at ensuring availability of sensitive diagnostic techniques and anti-trypanosomal drugs in districts still reporting cases of HAT.

Leprosy Control efforts in Zambia originated from Missionary activities in the 1930s. Leprosaria were founded all over the Country and care was provided to all those requiring leprosy treatment. By 1968, a total of 31 leprosaria were operational in the Country. However, with the introduction of Multi Drug Therapy (MDT) and the introduction of a national policy to treat all leprosy patients on ambulatory basis as close to their homes as possible, all the leprosaria were closed and are today operating as general hospitals. With the introduction of MDT in 1986, the leprosy prevalence dropped from 18,000 (1980) to approximately 1000 patients in 1996. In 2000, Zambia's leprosy prevalence further reduced to 0.67/10,000 population. However, the case detection was reportedly at 3.9/10,000 population (279 MB and 117 PB cases bringing the total to 396). This in itself was an indicator that there was a significant transmission of leprosy in the Country.

According to IDSR based reports, the numbers of dog bites are on the increase with occasional cases turning out to be rabbies. The ministry has put a programme in place that ensures availability of human anti-rabies vaccine which is accessed as need arises by districts and health facilities.

Table 16: Activities for implementing Strategic priority 4: Strategic Objective 4: Strengthening Planning, Resource Mobilization, Coordination and Inter-sectoral Collaboration for the Elimination of NTDs

Activity	Details (Sub-activities)	Timeframe/ Frequency	Resources needed
Strategic Objective 2: Scale up of integrated case-management-based diseases interventions for PC and IDM diseases			
Strategic Objective: To scale up integrated case-management-based diseases interventions for PC and IDM diseases			
Mapping for LF morbidity Timely distribution of drugs for MDAs	Conduct Mapping in all Provinces and districts	4 th quarter	DSA, Fuel/transport refund, Lunch allowance
Training of health workers on case management	Conduct a training in Case Management for 7 days	3 rd Quarter	DSA, Fuel/transport refund, Lunch allowance
Door to door case identification and Health Center identification (Trachoma)	Support door to door case identification and Health Center identification(Trachoma) in all provinces but selected districts	1 st quarter 2019	DSA, Fuel/transport refund, Lunch allowance
Conduct a training in reverse logistics	Conduct a training in Case Management for 7 days	4 th Quarter 2018	DSA, Fuel/transport refund, Lunch allowance
Conducting NTD drug audits	Conduct NTD drug audits	1 st quarter	DSA, Fuel/transport refund, Lunch allowance

Activity	Details (Sub-activities)	Timeframe/ Frequency	Resources needed	
Establish integrated vector management for targeted NTDs				
Hold consultative meetings with stake holders to: Accelerate efforts towards environmental and vector control, and Harness Research and Innovations towards the attainment of NTD-free status	Hold a 2 day consultative meetings with stake holders	3rd Quarter	DSA, Fuel/transport refund, Conference package, stationary	
Engage the National Reserch Authority	Hold a 2 day consultative meetings with stake holders	3rd Quarter	DSA, Fuel/transport refund, Conference package, stationary	
Incoporate stakeholders in Technical working groups	Form and conduct monthly meetings for TWG with all stakeholders assimilated	Ongoing	No cost	
Trachoma - - Engage with Ministry of Water, Sanitation and Environmental Determinants, Ministry of Local Government and Ministry of Education Ministry of Chiefs and Traditional Affairs	Hold a 2 day consultative meetings with stake holders	3rd Quarter	DSA, Fuel/transport refund, Conference package, stationary	

Implement Clinical Health Promotion Activities at all Levels	<ul style="list-style-type: none"> 5. Plan for Health Promotion Activities /Situation Analysis 6. Advocate for clinical health promotion 7. Adopt multi-media approaches design IEC Materials 8. Capacity Building of Health Promotion activities at all levels 9. M/E for HP activities 	2019-2023	Stationery, Fuel, Allowances, Venue
Trachoma			
Conduct Trichiasis surgery	Review of training manuals/modules	2019	Stationery, computers, printers, allowances, fuel transport, conference facilities
	Train trichiasis operators/health workers	2019-2023	Training modules, LDC Projector, surgery kits, surgery consumables(protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Conduct technical support supervision	2019-2023	Transport, fuel, allowances, stationery
Lymphatic Filariasis			
Conduct hydrocele surgery	Develop training manuals/modules	2019 - 2023	Stationery, computers, printers, allowances, fuel transport, conference facilities
	Train/ orient surgeons	2019-2023	Training modules, LDC Projector, surgery kits, surgery consumables(protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Perform hydrocele surgery	2019-2023	surgery kits, surgery consumables(protective clothing, sanitisers), transport, allowances, fuel
	Provide technical support supervision and surgical audits	2019-2023	Transport, fuel, allowances, stationery
Manage elephantiasis cases at community level	Develop training manuals/modules	2019	Stationery, computers, printers, allowances, fuel transport, conference facilities
	Train community health workers(first line health workers) on home based care management of elephantiasis	2019-2023	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Provide health education to the caregivers and the affected persons on hygiene practices	2019-2023	Flip charts,
	Provide technical support supervision	2019-2023	Transport, fuel, allowances, stationery
Cysticercosis			
Mapping	Develop training modules for training of Cysticercosis		Stationery, allowance, fuel, transport

	Develop surveillance tools		
	Conduct mapping training workshop	2019	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Conduct mapping	2019	Transport, microscopes, reagents, lab. Coats, reporting forms, allowances, fuel, human resource(technicians)
	Data analysis and report writing	2019	Computers, printers, stationery, fuel, transport, allowances,
Provide hospital based management of cases	Train/orient clinicians on detection and management of cysticercosis cases in disease endemic districts	2019 - 2023	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Provide treatment		Medicines
	Monitor cases for adverse events and resuscitate		Anti-inflammatory medicines (antihistamines)
HAT			
Mapping	Design mapping tools (SOPs)	2019	Computers, printers, stationery, fuel, transport, allowances,
	Develop surveillance tools		Computers, printers, stationery, fuel, transport, allowances,
	Train laboratory technicians on laboratory detection of HAT using new tools	2019- 2023	Training manuals, stationery Hall, reagents, microscopes
	Health facility based diagnosis of HAT	2019 - 2023	Microscopes, stationery (reporting forms)
	Conduct mapping training workshop	2019	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Conduct mapping	2019	Transport, microscopes, reagents, lab. Coats, reporting forms, allowances, fuel, human resource(technicians)
	Data analysis and report writing	2019	Computers, printers, stationery, fuel, transport, allowances,
Provide hospital based management of cases	Train clinicians on detection and management of HAT cases in disease endemic districts	2019-2023	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
Build capacity in diagnosis of HAT	Equip the laboratories in health facilities located in disease endemic districts	2019 -2023	Microscopes, reagents, consumables
Leprosy			
Conduct Active case	Development / review of leprosy training manuals	2019	Stationery, transport, fuel, allowances

detection and management	Training of health workers on case detection and management	2019- 2023	
	Active case detection and treatment	2019 – 2023	Medicines, allowances, transport, fuel
Case management			
Support national feedback for NTD CM working group	Conduct Multisectorial CM NTD working group meetings	2015-2020	Stationery, Allowances/Fuel, refreshments, transport
Create community awareness on NTD campaigns	Conduct social mobilisation	2019 – 2023	Stationery, Allowances/Fuel, refreshments, transport, PA system, radio and TV announcements, OB vans

Some NTD diseases require individual case management while others require chronic care. There are some cross cutting interventions that can be planned in an integrated manner and, also taking opportunity for integration of interventions with other non NTD activities (See Table 16)

Table 17: Case management and chronic care

Trachoma			
Conduct Trichiasis surgery	Review of training manuals/modules	2019	Stationery, computers, printers, allowances, fuel transport, conference facilities
	Train trichiasis operators/health workers	2019-2023	Training modules, LDC Projector, surgery kits, surgery consumables(protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Conduct technical support supervision	2019-2023	Transport, fuel, allowances, stationery
Lymphatic Filariasis			
Conduct hydrocele surgery	Develop training manuals/modules	2019 - 2023	Stationery, computers, printers, allowances, fuel transport, conference facilities
	Train/ orient surgeons	2019-2023	Training modules, LDC Projector, surgery kits, surgery consumables(protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Perform hydrocele surgery	2019-2023	surgery kits, surgery consumables(protective clothing, sanitisers), transport, allowances, fuel
	Provide technical support supervision and surgical audits	2019-2023	Transport, fuel, allowances, stationery

Manage elephantiasis cases at community level	Develop training manuals/modules	2019	Stationery, computers, printers, allowances, fuel transport, conference facilities
	Train community health workers(first line health workers) on home based care management of elephantiasis	2019-2023	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Provide health education to the caregivers and the affected persons on hygiene practices	2019-2023	Flip charts,
	Provide technical support supervision	2019-2023	Transport, fuel, allowances, stationery
Cysticercosis			
Mapping	Develop training modules for training of Cysticercosis		Stationery, allowance, fuel, transport
	Develop surveillance tools		
	Conduct mapping training workshop	2019	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Conduct mapping	2019	Transport, microscopes, reagents, lab. Coats, reporting forms, allowances, fuel, human resource(technicians)
	Data analysis and report writing	2019	Computers, printers, stationery, fuel, transport, allowances,
Provide hospital based management of cases	Train/orient clinicians on detection and management of cysticercosis cases in disease endemic districts	2019 - 2023	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Provide treatment		Medicines
	Monitor cases for adverse events and resuscitate		Anti-inflammatory medicines (antihistamines)
HAT			
Mapping	Design mapping tools (SOPs)	2019	Computers, printers, stationery, fuel, transport, allowances,
	Develop surveillance tools		Computers, printers, stationery, fuel, transport, allowances,
	Train laboratory technicians on laboratory detection of HAT using new tools	2019- 2023	Training manuals, stationery Hall, reagents, microscopes
	Health facility based diagnosis of HAT	2019 - 2023	Microscopes, stationery (reporting forms)
	Conduct mapping training workshop	2019	Training modules, LDC Projector, consumables (protective clothing, sanitisers), stationery, training hall, transport, fuel, allowances
	Conduct mapping	2019	Transport, microscopes, reagents, lab. Coats, reporting forms, allowances, fuel, human resource(technicians)
	Data analysis and report writing	2019	Computers, printers, stationery, fuel, transport, allowances,
Provide hospital based	Train clinicians on detection and management of HAT	2019-2023	Training modules, LDC Projector, consumables (protective

management of cases	cases in disease endemic districts		clothing, sanitisers), stationery, training hall, transport, fuel, allowances
Build capacity in diagnosis of HAT	Equip the laboratories in health facilities located in disease endemic districts	2019 -2023	Microscopes, reagents, consumables
Leprosy			
Conduct Active case detection and management	Development / review of leprosy training manuals	2019	Stationery, transport, fuel, allowances
	Training of health workers on case detection and management	2019- 2023	
	Active case detection and treatment	2019 – 2023	Medicines, allowances, transport, fuel
Case management			
Support national feedback for NTD CM working group	Conduct Multisectorial CM NTD working group meetings	2015-2020	Stationery, Allowances/Fuel, refreshments, transport
Create community awareness on NTD campaigns	Conduct social mobilisation	2019 – 2023	Stationery, Allowances/Fuel, refreshments, transport, PA system, radio and TV announcements, OB vans

CROSS CUTTING INTERVENTIONS	NTDS TARGETED	METHOD OF INTERVENTION DELIVERY	REQUIREMENTS	OTHER NON-NTD OPPORTUNITIES FOR INTEGRATION
<ul style="list-style-type: none"> ▪ Capacity Building of Health Workers on care and support ▪ Families/Communities IEC Materials on care and support ▪ Advocate for strengthened care and support at all levels ▪ M/E for care and support at all levels of implementation 	Integrated NTDs activities		<ul style="list-style-type: none"> • Capacity Building of health workers at all levels • Production and distribution of IEC Materials on care and support • Mass media on care and support of all NTDs • Advocacy meetings to all stakeholders • M/E Implementation and 	Awareness on health seeking behaviours on care and support to the general public

CROSS CUTTING INTERVENTIONS	NTDS TARGETED	METHOD OF INTERVENTION DELIVERY	REQUIREMENTS	OTHER NON-NTD OPPORTUNITIES FOR INTEGRATION
			response of care and support	
SURGERY	Lymphatic Filariasis hydrocoele, Trachoma trichiasis	-Hospital based -Elective surgery -Mobile surgery outreach camps	-Training of Medical Doctors, clinical officers and nurses - Surgery kits, dermatome and mesh graft (for skin grafting) -hospitals facilities or appropriate basic facilities with good surgical facilities -Follow up/supervision	Capacity building for basic surgery at the district level Infrastructure Public, private partnerships
Hygiene, Skin care, daily washing, orientation, mobility (for those already blind)	Trachoma	Health education Advocacy, Training Monitoring and Evaluation, Social Mobilisation, Reporting,	Washing kits Posters Brochures	School Health and Nutrition programme FRESH under the School Health Programme

CROSS CUTTING INTERVENTIONS	NTDS TARGETED	METHOD OF INTERVENTION DELIVERY	REQUIREMENTS	OTHER NON-NTD OPPORTUNITIES FOR INTEGRATION
		Sensitization and Follow up		SPLASH
Case management	HAT,	Case detection	Medicines and Lab supplies, fuel, allowances	IDSR
	HAT, trachoma	Ambulatory care	Motorcycles, fuel, allowances	
	HAT	Health facility based care	Drugs and other supplies	

2.7. Scaling up NTD transmission control interventions

In scaling up NTD transmission control interventions, it is important to remember that interventions are not exclusive to NTDs but are cross cutting for all vector borne diseases. Therefore, there is need to collaborate with existing programmes like the National Malaria Control Programme, water and sanitation, and other stakeholders. Transmission control interventions are complementary to preventive chemotherapy and case management and require to be conducted in all NTD endemic areas. Transmission control interventions include vector control and Preventive chemotherapy, Health Education, Access to clean water, Sanitation improvement and Environmental manipulation (PHASE). The NTD unit needs to collaborate with the Malaria Control Center on matters of integrated Vector Management in relation to activities for disease transmission control.

Table 19 provides a summary on key activities planned to be carried out to implement in transmission control.

Table 18: Intervention Packages for Transmission Control

Cross cutting intervention	NTDs TARGETED	REQUIREMENTS	OTHER NON-NTDS OPPORTUNITIES FOR INTEGRATION
Vector control	LF Schistosomiasis HAT	-LLIN/ITNs -Insecticide (pyrethroids) supported by malaria control Molluscides -Insecticides -DDT -Tsetse targets (Traps)	-Malaria vector control -Integrated vector management (IVM)
Preventive Chemotherapy	LF Schistosomiasis STH Trachoma	Medicines	Child health week Routine Under five Clinics, Immunisation programmes SPLASH FRESH

Cross cutting intervention	NTDs TARGETED	REQUIREMENTS	OTHER NON-NTDS OPPORTUNITIES FOR INTEGRATION
Health Education	LF Schistosomiasis STH Trachoma Cysticercosis HAT Leprosy	Flip charts Pamphlets Electronic media Print media Health Education Drama News letters	NGOs Community participation CBOs
Access to clean water supply	Schistosomiasis, Soil Transmitted Helminthes (STH) Trachoma LF	Boreholes Piped water Soap	-Developmental programmes by line ministry (e.g. WASHE) -Rural Water & Sanitation Programme) -School health and Nutrition programmes
Sanitation improvement	Schistosomiasis STH Trachoma Cysticercosis	Toilets Water Disinfectants Soap	WASHE Rural Water and Sanitation School Health Programme SAFE NGOs Community participation CBOs Private companies Slaughters house owners

2.7.1. PHARMACOVIGILANCE IN NTD CONTROL ACTIVITIES

In view of the already existing National Pharmacovigilance system for other health programmes, NTD drugs for preventive chemotherapy and case management will be integrated in to the main stream system for monitoring, reporting and management of side effects and adverse events that may be linked to NTD interventions. Sensitization of community drug distributors and health workers will be done during trainings prior to MDA implementation and reinforced for clinicians involved in NTD case management.

2.7.2. STRENGTHENING CAPACITY AT NATIONAL LEVEL FOR NTD PROGRAMME MANAGEMENT AND IMPLEMENTATION

The table below shows activities and resources needed for strengthening capacity for NTD programme implementation.

Table 19: Activities and resources needed for strengthening capacity for NTD programme

Activity	Detail of sub-activity	Timeframe	Resources needed
Strategic objective 4: strengthening capacity at national level for NTD management and implementation			
Capacity building	Training NTD Programme officers/specialists at central level, health promotion officers, pharmacists, data managers, accountant and planners	2019-2023	Training modules, conference package, per-diems, transport and stationary
	Participation at international NTD meetings	2019-2023	Air tickets/transport accommodation and per-diem
Procurement Equipment	Procurement of office equipment	Quarter 1 2019	Funds
	Procurement of field equipment	Quarter 1 2019-2023	Funds
	Procurement of programme vehicles	2019 - 2023	Funds

2.7.3. ENHANCING PLANNING FOR RESULTS, RESOURCE MOBILIZATION AND FINANCIAL SUSTAINABILITY

The table below shows activities associated with enhanced planning for results, resource mobilization and financial sustainability.

Table 20: Activities for enhance planning for results, resource mobilization and financial sustainability

Activity	Details (Sub-activities)	Timeframe	Resources needed
Strategic Objective 1: Develop integrated, multi-year strategic plans and gender-sensitive annual operational plans for the control, elimination and eradication of targeted NTDs at national, provincial district and community levels			
Develop the NTD Master Plan and 2019 Annual Action Plan	Print Master-plan and 2019 annual plans	2019	Venue, media, transport refund,
	Disseminate the NTD Master plan and 2015 annual plan at National, provincial, district and community levels	2019	resource persons, per diems, meals
Develop action plans for 2019 – 2023	Conduct integrated annual planning meetings at national, provincial, district and community levels with other programs	2019-2023	TIPAC
Strategic Objective 2: Enhance resource mobilization approaches and strategies at national, provincial and district levels for NTD interventions			
Strengthen systems for NTD resource mobilization at national and provincial levels	Convene a meeting to develop a resource mobilization strategy for the NTD programme	2015	Venue, transport refund, resource persons, per diems, meals
	Convene annual advocacy meeting for resource mobilisation	2015-2020	Venue, transport refund, resource persons, per diems, meals
	Build national capacity on resource mobilization and advocacy strategy.	2015-2017	Venue, per diems, transport refund, stationery, Consultancy fees
Mobilise resources to support NTD programme Implementation	NTD participation at SAG meetings	2015-2020	Fuel refund. Per diem, etc TIPAC
	Contribute to Mid Term review report on water and sanitation by UN agencies (UNDP and UNICEF)	2015- 2020	NTD program
	Request for financial support from WHO	2015- 2020	MOH/MCDMCH
	Parliamentary briefs on NTDs	2015- 2020	NTD program coordinator
Strategic Objective 3: Strengthen the integration and linkages of NTD programme and financial plans into sector wide national budgetary and financing mechanisms			
Advocate for increase in budget allocation for NTDs program	Attend planning meeting at MOH and MCDMCH	2015-2020	NTD Program Coordinator
	Organise an annual work-plan meeting with all partners	2015-2020	
	Ministers and PSs to present NTD budget to Ministry of Finance for additional financial allocation	2015- 2020	Ministers and Permanent Secretaries (MoH, MCDMCH and MoF)
Ensure NTD planning and budgets are	Ensure that NTD budgets are integrated within sector wide	2013– 2017	NTD program coordinators, Director

Activity	Details (Sub-activities)	Timeframe	Resources needed
reflected within the sector wide and government financial systems	and government planning & budgets at national, provincial, district and community level.		Planning
<i>Strategic Objective 4: Update national NTD policies and elaborate guidelines and tools to guide effective policy and programme implementation</i>			
Up -date NTD policy	Convene bi-annual implementation review meeting	2015-2020	Venue, transport refund, resource persons, per diems, meals
Disseminate edited master-plan	Convene Mid- term review meeting to up- date NTD master-plan.	2017	Venue, transport refund, resource persons, per diems, meals
	Reproduce edited master-plan	2017	TIPAC
	Distribute edited master-plan	2017	TIPAC

2.7.4. STRENGTHENING GOVERNMENT OWNERSHIP, ADVOCACY, COORDINATION AND PARTNERSHIPS

This section describes how the NTD control, elimination and eradication program will be streamlined at national level to establish effective long term multi – sectorial involvement at various operational levels as well as to be responsive to the larger national goals. The existing interactions among the major stake- holders, planners and partners will be the foundation for defining how the streamlining of activities will be affected. The stakeholders will ensure that sufficient advocacy for the NTD program is kept high on the agenda.

The following are the guiding principles for strengthening government ownership, advocacy, coordination and partnership:

- Leadership and governance: Structural reform within the health sector relating to NTD programmes and harmonization, alignment, oversight and regulation of interventions.
- Health workforce: Strengthening programme staff capacity (training needs to enhance human resources) for the purpose of the control activities. Indicate the category (e.g. laboratory diagnosis), level, type or number of training events required, and units involved in training;
- Medical products, vaccines and technologies: establish and enforce norms, standards, policies, reliable procurement practices for drug quality.
- Providing full contact details of NTD programmes at national level.
- Providing an overview of existing capacity at national level for NTD Programme management and implementation against each of the points above indicating what improvement will be made where these are seen necessary.

Table 21: List and the roles and responsibilities of sectors and coordination mechanisms in the strategic priority related to coordination

Partner	Roles
Ministry of Health	Coordinates national and sub-national activities through the Interagency Coordination Committee for NTDs, the Technical Working Group, develop national strategic plans, policy review, appoint the necessary staff for the program, ensure integration of activities for the different NTDs and other public health initiatives, establishing inter-sectorial links and collaboration, management of drugs supply.
Ministry of Community Development Mother and Child Health	Implements NTD control, elimination and eradication program activities, advocacy, mapping, planning and implementation of interventions, morbidity management; supervision, monitoring and evaluation of implementation of interventions, district and community level capacity building of health workers and community based volunteers, monitoring and evaluation and surveillance and plays the role of NTD TWG Secretariat.
Ministry of Education, Science, and Vocational Training and Early Education (MoESVTEE)	Plays key role in implementation of NTD campaigns by availing schools as service delivery sites and advocating and mobilizing students. It also facilitates incorporation of NTDs in school curricula and dissemination of key messages. Promotes the Water And Sanitation Hygiene (WASH) school program, the Focusing Resources on Effective School Health (FRESH) framework and School Led Total Sanitation (SLTS) project.
Ministry of Mines, Energy and Water Resources Management	This Ministry is in charge of water resources management and plays a key role in increasing access to safe water and environmental management which address a major component of the Preventive Chemotherapy, Health Education, Access to Safe Water, Sanitation improvement and Environmental manipulation (PHASE) strategy . It enforces the Water Resources Management Act no. 21 of 2011 which safe-guards the

Partner	Roles
	environment against diseases such as Schistosomiasis through snail control.
Ministry of Communication and Transport	Provides road access to hard to reach areas to enable facilitate better communication and implementation of activities. Establishment of communication networks to facilitate communication (mobile phones, improve internet coverage at provincial and district level, radio communication system and TV)
Ministry of Agriculture and Livestock	The Ministry is in charge of ensuring that crop and animal farming are conducted in an appropriate and safe environment. Examples are animals and poultry are reared in enclosures, irrigation channels are lined, there is regular flushing of snails, ensure sanitation in farming compounds, sensitize farmers on the dangers of using inadequately treated human excreta.
Ministry of Finance	The Ministry of Finance plays a role in allocation of financial resources for the NTD program.
Ministry of Local Government and Housing	Promote good housing, infrastructure and improved sanitation to prevent and control NTDs such as Schistosomiasis, Soil Transmitted Helminthes and Blinding Trachoma. It oversees the implementation and enforcement of the Public Health Act to ensure proper hygiene and sanitation containment. They oversee the Community Led Total Sanitation and the Rural Water Supply and Sanitation program, monitor safe treatment of sewage by the utility companies.
Ministry of Chiefs and Traditional Affairs	To give access to the chiefdoms for NTD activities, assist community mobilization during MDA campaigns and identify Community Based Volunteers.
Ministry of Gender and Child Development	Its role is to implement the national gender policy which promotes improved equitable access to interventions.
Ministry of Information and Broadcasting Services	The Ministry plays a major role in sensitizing the public on the various NTDs and the on-going activities in their communities through radio and T.V.
Research institutions and universities	Conduct operational research and provide evidence for policy direction.
Faith Based Organizations	They assist in awareness raising in communities on NTDs.
NGOs	Assist MOH and MCDMCH with mapping, implementing MDA, and community health education and mobilization; support water and sanitation improvement efforts, engage in advocacy and resource mobilization.
WHO	Provision of required technical support and guidelines, advocacy, technical assistance in development of national plan, resource mobilization, monitoring and evaluation of plan implementation, information sharing, support cross-border collaboration, partner coordination
Funding partners (Bilateral, Multilaterals, and Foundations etc.)	Provide financial support for implementation of regional and country strategic plans ; support and advocate for integrated approach to NTD control ; support health education, water and sanitation improvement efforts, support key operational research

Table 22: Activities for Strengthening government ownership, advocacy, coordination and partnership

Activity	Details (Sub-activities)	Timeframe/Frequency	Resources needed
Strategic Objective 1: Strengthen coordination mechanism for the NTD control programme at national, provincial and district levels.			
Strengthen Coordination systems for the NTD Programme at national, provincial, district and community levels.	Establish an Inter- Agency Coordination Committee, TWG and identify secretariat,	2015	Stationery, hall hire(TIPAC)
	Write appointment letters with terms of reference.	2015	Stationery
	Formalize and operationalize the ICC and TWG at National Level	2015	Resource persons, allowances, hall hire, meals, stationery, fuel refund, communication, office equipment
	Conduct ICC and TWG meetings	2015 – 2020	Resource persons, allowances, hall hire, meals, stationery, fuel refund, communication, office equipment
	Advocate for more Human Resource for NTD program ((Pharmacist, Planner, Accountant, M and E person, Data base Manager, Communication Officer)	2015- 2016	Personnel and recruitment of personnel
	Appoint NTD focal point persons at provincial and district and community level to support NTD activities	2015	Appointment letters from MOH/MCDMCH
	Conduct National NTD Technical meetings	2015-2020	Resource persons, allowances, hall hire, meals, stationery, transport refund, communication, office equipment
	Support meetings for sub working groups under the NTD Programme (M&E, CM, PCT, Research, Drugs)	2015 – 2020	Resource persons, allowances, hall hire, meals, stationery, transport refund, communication, office equipment
Strategic Objective 2: Strengthen and foster partnerships for the control, elimination and eradication of targeted NTDs at national, provincial, district and community levels.			
Strengthen and foster Partner Involvement in the NTD Control programme	Convening NTDs stakeholders meetings.	2015 – 2020	Resource persons, allowances, hall hire, meals, stationery, transport refund, communication, office equipment
	Develop NTD advocacy materialsfor stakeholders.	2015 – 2017	Resource persons, allowances, hall hire, meals, stationery, transport refund, communication, office equipment
	Develop/Review MOUs for Partners in NTD Control (New and Old)	2015	Resource persons, allowances, hall hire, meals, stationery, transport refund,

Activity	Details (Sub-activities)	Timeframe/Frequency	Resources needed
			communication, office equipment resource persons
Strategic Objective 3: Enhance high level reviews of NTD programme performance and the use of lessons learnt to enhance advocacy, awareness and effective implementation.			
Conduct annual review of programme performance	Convene annual stakeholders meeting for technical review of programme performance	2019-2023	Resource persons, allowances, hall hire, meals, stationery, transport refund, communication, office equipment
Update annual work plan based on implementation experience	Convene annual meetings at national, provincial, district and community level.	2019-2023	Resource persons, allowances, hall hire, meals, stationery, transport refund, communication, office equipment
Conduct quarterly meetings between MOH and MCDMCH	Write invitation letters	2019-2023	TIPAC
Disseminate NTD materials (Newsletters, reports etc)	Print materials,	2019-2023	Resource persons and funding
Capacity building of NTD staff in report writing to enable them produce quality evidence based papers for presentation to relevant	Design training materials	2019 – 2023	TIPAC
	Conduct training	2019-2023	TIPAC
Present NTD updates in high level meetings at national and international level	Participate in parliamentary briefs to update NTD programme achievements and needs	2019– 2023	Refreshments, stationery
	Updates on NTD program during the Joint Annual Review (JAR) meetings	2019 – 2023	Stationery, printing costs
	Participate in International meetings sharing NTD experiences	2019- 2023	International travel allowances (Air tickets, transit and upkeep)
	Organize quarterly multi-sectorial high level meeting (Livestock, Water sanitation, education, Finance, Ministry of Community and social services)	2019- 2023	Resource persons, funding
Strategic Objective 4: Strengthen advocacy, visibility and profile of NTD control, elimination and eradication interventions at National, provincial, district and community levels.			
Strengthen Advocacy and Communication activities for NTDs	Conduct workshops for journalists on prevention and control of NTD for advocacy	2019-2023	Resource persons, allowances, hall hire, meals, stationery, transport refund, communication,

Activity	Details (Sub-activities)	Timeframe/Frequency	Resources needed
	Print and launch of the Master-plan and annual plan	2018	Funds
	Develop a communication strategy	2018	Funds
	Develop and disseminate Health Education materials for advocacy	2019– 2023	Funds
	Develop broadcast media material (in local languages) for NTD programmes for National, provincial, district and community levels.	2015– 2020	Media Campaign, Stationary, IEC Materials, resource persons, funds
	Identification of an NTD Ambassador	2018	Nomination.
	Conduct Public event for NTDs	2019	Venue, Stationary, IEC Materials
	Advocate for a week of NTD activities as an annual event in the Ministry of health calendar.	2019	TIPAC
Procurement of vehicles and motorcycles	Procure 4x4 motor vehicles, motor bikes and bicycles.	2019 – 2023	Funds

2.7.5. MONITORING AND EVALUATION

This section contains information on monitoring and evaluation including the following:

- a) The indicators to be monitored for each disease,*
- b) Logical framework, and*
- c) Major M&E activities to be conducted.*

Monitoring is the process of continuous observation and collection of data on the NTD programme to ensure that the programme is progressing as planned.

Evaluation is the systematic and critical analysis of the adequacy, efficiency and effectiveness of the programme, its strategies as well as progress. Evaluation refers to long, mid-term and annual analysis of performance in relation to the goals, objectives and target sets.

The table below describes how

- i. The NTD information will fit in the existing system of M&E in the Ministry of Health including the HMIS and IDSR systems
- ii. The data flow from peripheral level to national level and periodicity

Independent evaluation will be conducted (e.g. at least every 3 years for outcome and every 5 years for impact depending on the type of disease to be evaluated)

Table 23: Strategic priority 4: Enhance NTD Monitoring and evaluation, surveillance and operations research

Activity	Details (Sub-activities)	Timeframe/ Frequency	Resources needed
Strategic Objective 1: Develop and promote an integrated NTD M&E framework and improve Monitoring of NTDs, within the context of national health information systems.			
Strengthen monitoring of NTD programme performance & outcomes.	Hire of consultant to design and develop NTD M&E System	2018	Transport, Venue, Consultant fee, Stationary
	Develop M&E Tools to capture the indicators	2018	Human resource, Stationery, Transport, Venue
	Hold a consensus meeting on the designed NTD M&E System	2018	Human resource, Stationery, Transport, Venue
	Conduct a Pilot Test of the developed M&E tools in selected districts	2018	Human resource, Stationery, Transport, Venue
	Meeting to review and revise piloted M&E Tools	2019	Human resource, Stationery, Transport, Venue
	Training Health workers on Monitoring NTD program performance	2019	Human resource, Stationery, Transport, Venue
	Conduct M &E Review meetings at national, Provincial and District level	2019 – 2023 (twice a year)	Human resource, Stationery, Transport, Venue
Supportive supervisory visits at all levels	Conduct supervisory visits to provinces, districts and health facilities during MDA and other related NTD activities e.g. Technical support.	2019 – 2023	Human resource, Stationery, Transport, Allowance
Conduct Epidemiological, geographical and therapeutic assessments.	Report on geographical, epidemiological and therapeutic coverage of MDA activities to monitor performance	2019 – 2023	Human resource, Stationery, Transport
Strategic Objective 2: Strengthen and foster partnerships for the control, elimination and eradication of, targeted NTDs at national, provincial, district and community levels			
Strengthen and foster partnerships	Formation of ICC, and technical working group, provincial multi-sectoral committees, and community committees for NTDs.	2019	Human resource, Stationery, Transport, Venue
	Conduct orientation and training of committees	2019 – 2023	Human resource, Stationery, Transport
	Carry out capacity building for NTD in other sectors (e.g. government	2019 – 2023	Human resource, Stationery,

	ministries)		Transport, Venue
	Hold collaborative feedback meetings for stakeholders at all levels.	2019 - 2023 (annually)	Human resource, Stationery, Transport, Venue
	Identify and train focal point persons in each line ministry (2 people per ministry: the main and the proxy)	2019	Human resource, Stationery, Transport, Venue
Strategic Objective 3: Strengthen surveillance of NTDs and strengthen response and control of epidemic prone NTDs			
Build Capacity in NTD surveillance	Hold meeting to Review IDSR for integrating NTDs	2019	Human resource, Stationery, Transport, Venue
	Integrate NTD into IDSR and IDSR into the HMIS	2019	Human resource, Stationery, Transport, Venue
	Train health workers in surveillance biased to NTDs at national, provincial, District, and health facility levels.	2019	Human resource, Stationery, Transport, Venue
	Hold regular quarterly meetings	2019 - 2023	Human resource, Stationery, Transport, Venue
	Develop reporting tools	2019	Human resource, Stationery
	Produce quarterly and monthly bulletins for communication and dissemination	2019 - 2023	Human resource, Stationery
	Formation of steering committee for surveys and sentinel surveillance	2019	Human resource, Stationery, Transport, Venue
Incorporate the NTD Indicators in the national health surveys	Organize a meeting to identify appropriate NTD Indicators for the existing national surveys	2019	Human resource, Stationery, Transport, Venue
Conduct NTD national surveys	Selection of NTDs to be included in the NTD national survey	2019	Human resource, Stationery, Transport, Venue
	Selection of indicators for the selected NTDs	2019	Human resource, Stationery, Transport, Venue
	Conduct the NTD national survey	2019, 2023	Human resource, Stationery, Transport, Venue, Laboratory Supplies
Set up NTD sentinel surveillance sites	Selection of NTD sentinel surveillance sites	2019	Human resource, Accommodation, Venue, Stationery, Transport
	Sentinel site surveillance	2019 - 2023	Human resource, Accommodation, Venue, Stationery, Transport, Laboratory Supplies

Strengthen laboratory services in the diagnosis of NTDs in all health facilities	Conduct a needs assessment to identify gaps in the lab diagnosis of NTDs	2015-2015	Human resource, Stationery, Transport, Venue
	Procure laboratory equipment to enhance the detection of NTDs	2015-2019	Funds
	Develop training materials for NTD diagnosis	2015-2016	Human resource, Stationery, Transport, Venue
	Conduct in-service training in the lab diagnosis of NTDs	2015-2019	Human resource, Stationery, Transport, Venue
	Conduct onsite technical support to strengthen the diagnosis of NTDs in the country	2014-2019	Human resource, Stationery, Transport
	Organise a meeting to review activities related to NTDs diagnosis		Human resource, Stationery, Transport, Venue
Implement & disseminate operational and implementation research activities	Conduct operational research on NTDs including animal reservoirs	2015 – 2020	Human resource, Stationery, Transport
	Determine the types of infecting vectors in Zambia	2015 – 2019	Research funds
	Conduct impact assessment studies on different drug delivery methods (community based treatment, Community Directed Treatment, school based) health education	2015 – 2019	Research funds
	Conduct studies on social and economic determinants of NTD infections	2015 – 2019	Research funds
	Conduct randomized controlled trials of annual verses biannual treatment effect on <i>S.mansoni</i> prevalence and morbidity	2015 – 2019	Research funds
	Prevalence and morbidity of STH and STH in under-five children and adults.	2015 – 2019	Research funds
	Conduct implementation research on challenges experienced during implementation process	2015 – 2019	Research funds
	Disseminate operational research findings	2015 – 2019	Human resource, Stationery, Transport
Strategic Objective 4: Establish integrated data management systems and support impact analysis for NTD plan			

Integration of NTDs into HIMS	Review the current HMIS system and it's indicators in the context of NTDs	2015	Human resource, Stationery, Transport, Venue
	Develop community HMIS with component for NTDs	2015	Human resource, Stationery
	Design a software package for NTD indicators in the context of HMIS	2015	Human resource, Stationery, Transport, Venue

2.7.6. Post intervention surveillance and integration within primary health care

The success in maintaining the NTD disease levels below thresholds where they are not of public health significant following intense period of interventions depend on strong post-intervention surveillance and ability by the primary health care to incorporate the surveillance and residual control activities within routine health care delivery. Zambia will identify sentinel sites for spot checks in the following areas.

Table 24: Activities for surveillance and sustainability

Activity	Details (Sub-activities)	Timeframe/ Frequency	Resources needed
<i>Strategic Objective: Strengthening monitoring programme performance impact and outcome and sustainability</i>			
Capacity building	To train the clinic managers in case identification and management and referral system	2015-2020	Venue, accommodation, stationary
	Health centres to actively participate during the PCT and MDA and monitor the SAEs	2015-2020	Transport, lunch allowance
NTD reporting	Data base at district level	2015-2020	
To incorporate the surveillance and residual control activities within routine health care delivery.	Monitor drug distribution in Health facilities	2015-2020	Human resource, Transport, Stationary
To Conduct impact assessment	Conduct impact assessment by independent	2016 - 2020	Human resource, Transport, Stationary, Laboratory supplies
	Monitor drug access from health facilities	2015-2020	Human resource, transport, stationary

3. Annexes

3.1. Co-Endemicity

Table 25: NTD Co Endemicity

	District	Diseases									
		Preventive Chemotherapy Diseases				Case management Diseases					
		LF	SCH	STH	TRA	LF	TRA	Cysticercosis	Leprosy	Rabies	HAT
Luapula	Chiengi		+	+	+				+		
	Chembe		+						+		
	Chipili	+	+						+		
	Nchelenge	+	+						+		
	Mwansabombwe	+	+						+		
	Milenge	+	+	+					+		
	Mansa		+						+		
	Kawambwa	+	+						+		
	Samfya		+						+		
	Mwense	+	+								
	Lunga		+								
Central	Chibombo	+	+								
	ItezhiTezhi	+	+						+		
	Kabwe	+	+						+		
	Kapiri Mposhi	+	+	+	+				+		
	Mkushi	+	+	+	+				+		
	Mumbwa	+	+						+		
	Serenje	+	+	+					+		
	Chisamba	+	+						+		
	Ngabwe	+	+	+	+						
	Luano	+	+	+	+				+		
	Chitambo	+	+	+					+		
Lusaka	Chilanga	+	+	+							
	Chirundu	+	+						+		
	Chongwe	+	+								
	Kafue	+	+	+					+		
	Luangwa	+	+	+							
	Lusaka		+	+					+		
	Rufunsa	+	+								
	Shibuyunji	+	+								
Muchinga	Nakonde	+	+	+					+		
	Chama		+	+			+		+		
	Isoka	+	+						+		
	Mpika	+	+	+			+		+		
	Mafinga	+	+						+		
	Chinsali		+	+	+				+		
	Shiwangandu		+	+	+				+		
NorthWestern	Chavuma	+	+	+					+		

	District	Diseases											
	Ikelenge	+	+	+							+		
	Kabompo	+	+	+							+		
	Kasempa	+	+	+							+		
	Mufumbwe	+	+	+							+		
	Mwinilunga	+	+	+							+		
	Solwezi	+	+	+							+		
	Zambezi	+	+	+							+		
	Manyinga	+	+	+							+		
Eastern	Chipata	+	+						+		+		
	Lundazi	+	+	+					+		+		
	Petauke		+	+							+		
	Katete		+						+		+		
	Sinda		+	+							+		
	Nyimba		+	+							+		
	Chadiza		+	+									
	Mambwe	+	+						+				
	Vubwi		+	+								+	
Western	Kalabo	+	+	+	+				+		+		
	Kaoma	+	+	+	+						+		
	Limulunga	+	+	+									
	Luampa	+	+	+	+				+				
	Lukulu	+	+	+	+						+		
	Mitete	+	+	+	+								
	Mongu	+	+	+							+		
	Mulobezi	+	+	+	+								
	Mwandi	+	+	+	+						+		
	Nalolo	+	+	+	+				+		+		
	Nkeyema	+	+	+	+				+				
	Senanga	+	+	+	+				+		+		
	Sesheke	+	+	+	+						+		
	Shangombo	+	+	+	+						+		
	Sikongo	+	+	+	+								
Sioma	+	+	+	+				+		+			
Northern	Chilubi	+		+	+				+		+		
	Kaputa	+	+	+	+						+		
	Kasama	+	+	+	+				+		+		
	Luwingu	+	+	+	+						+		
	Mbala	+	+								+		
	Mporokoso	+	+		+						+		
	Mpulungu	+	+	+							+		
	Mungwi	+	+	+	+						+		
	Nsama	+	+	+	+						+		
Southern	Choma	+	+		+				+				
	Chikankata		+		+				+		+		
	Gwembe	+	+		+				+				
	Mazabuka		+		+				+		+		

	District	Diseases									
	Kalomo	+	+				+				
	Kazungula	+	+		+		+				
	Namwala	+	+		+		+			+	
	Monze	+	+		+		+			+	
	Pemba	+	+		+						
	Siavonga	+	+								
	Sinazongwe	+	+		+		+			+	
	Livingstone	+	+		+		+			+	
	Zimba	+	+				+				
Copperbelt	Chililabombwe	+	+	+						+	
	Chingola	+	+							+	
	Kalulushi	+	+	+							
	Kitwe	+	+	+	+					+	
	Luanshya	+	+	+							
	Lufwanyama	+	+	+							
	Masaiti	+	+	+							
	Mpongwe		+	+						+	
	Ndola	+								+	
	Mufulira	+	+	+	+						

* LF Morbidity Mapping has not started in Zambia

3.2. Disease distribution

Table 26: Known disease distribution in Zambia – Lymphatic Filariasis

Province	Name of Implementation Unit	Village	Longitude	Latitude	Elev (m)	Study method	ICT Prev. %	Year done
Northern Province	Mbala District	Mwamba	31.62 919	08.91 812	1567	ICT	0	Oct-03
	Mbala District	Chilundumusi	32.04 720	09.16 931	1383	ICT	0	Oct-03
	Mbala District	Zombe	31.24 823	08.59 757	1179	ICT	1.1	Oct-03
	Nsama					ICT		
	Kasama	Munkonge	30.67 731	10.45 463	1254	ICT	6.1	Jun-09
	Mungwi	Mumba	31.83 226	10.38 782	1211	ICT	5.9	Jun-09
	Mporokoso	Chisha Mwamba	30.09 380	09.34 672	1424	ICT	5	Jun-09
	Luwingu	Nsombo	29.93 965	10.81 509	1175	ICT	11	Jun-09
	Chilubi	Chaba	30.08 515	10.97 870	1189	ICT	11	Jun-09
	Kaputa (Nsama)	Kalaba	29.87 597	08.41 696	944	ICT	5.8	Jun-09
	Mpulungu	Mpulungu DH	31.11 469	08.76 310	778	ICT	9.8	Jun-09
Copperbelt Province	Mpongwe District	Malembeka/ Lesa	28.40 912	13.59 260	1250	ICT	0	Sep-03
	Mpongwe District	Machiya	27.60 477	13.64 184	1149	ICT	0	Sep-03
	Mpongwe District	Mwinuna	27.83 713	13.83 561	1160	ICT	0	Sep-03
	Ndola	Chipulukusu	28.65 772	12.94 434	1242	ICT	2.9	Jan-10
	Masaiti	Fiwale Mission HC	28.71 721	13.20 905	1275	ICT	5.8	Jan-10
	Luanshya	Mpatamatwe Township	28.31 039	13.09 887	1255	ICT	9	Jan-10
	Kitwe	Buchi Clinic	28.20 923	12.79 509	1218	ICT	2	Jan-10
	Kalulushi	Chibuluma	28.13 719	12.85 760	1284	ICT	5	Jan-10
	Mufulira	Lwansole Clinic	28.18 865	12.51 235	1286	ICT	3.9	Jan-10
	Chingola	Chawama Clinic	27.84 022	12.55 812	1361	ICT	2	Jan-10
	Chililabombwe	Kawama	27.85 828	12.32 960	1323	ICT	1	Jan-10
Lufwanyama	St Joseph Mission Clinic	28.01 319	12.89 162	1220	ICT	10	Jan-10	
North-Western Province	Zambezi District	Ndungu	23.00 685	13.21 526	1049	ICT	1.5	Aug-05
	Zambezi District	Ishindi	23.03 836	13.23 639	1079	ICT	0.7	Aug-05
	Zambezi District	Kucheka	22.54 022	13.46 641	1057	ICT	0	Aug-05
	Solwezi	Solwezi Urban Clinic	26.39 735	12.18 743	1335	ICT	2	Dec-09
	Solwezi	Lumwana East RHC	25.65 627	12.27 158	1272	ICT	2.8	Dec-09
	Mushidano (was Solwezi)					ICT		
	Kaliumbilia (was Solwezi)					ICT		

Province	Name of Implementation Unit	Village	Longitude	Latitude	Elev (m)	Study method	ICT Prev. %	Year done
	Ikelenge (was Mwinilungu)					ICT		
	Mwinilunga	Kalene Mission Hospital	24.18 807	11.17 560	1195	ICT	1	Dec-09
	Kasempa	Kasempa urban clinic	25.83 262	13.45 834	1219	ICT	5	Dec-09
	Mufumbwe	Boma Clinic	25.00 708	13.14 079	1159	ICT	4.7	Dec-09
	Kabompo	Kabompo MCH	24.20 558	13.59 622	1127	ICT	2	Dec-09
	Manyinga (was Kabompo)					ICT		
	Chavuma	Chiyeke RHC	22.73 300	13.07 354	1075	ICT	4.9	Dec-09
Eastern Province	Lundazi District	Mwase-Lundazi	33.20 236	12.24 413	1215	ICT	17.2	Aug-05
	Lundazi District	Nkhanga	33.02 249	12.09 161	1092	ICT	12.5	Aug-05
	Lundazi District	Zumwanda	33.03 032	12.25 324	1133	ICT	6.9	Aug-05
	Chipata	Madzimoyo HC	32.50 237	13.69 948	921	ICT	2	Aug-10
	Petauke	Mumbi RHC	31.31 067	14.47 908	989	ICT	1	Aug-10
	Mambwe	Masumba Zonal	31.94 505	13.20 920	557	ICT	2	Aug-10
	Katete	Katete Urban Clinic	32.06 440	14.09 109	1025	ICT	1	Aug-10
	Chadiza	Nsanu RHC	32.20 207	14.04 126	972	ICT	0	Aug-10
	Nyimba	Chipembe RHC	31.01 949	14.53 558	857	ICT	0	Aug-10
Central Province	Serenje District	Mulilima	29.54 961	13.21 955	1464	ICT	0	Aug-05
	Serenje District	Muchinka	30.26 406	12.56 241	1429	ICT	10	Aug-05
	Serenje District	Mapepala	30.08 226	12.41 935		ICT	19.8	Aug-05
	Kapiri Mposhi	Tazara/ Kawama HC	28.68 075	13.95 684	1227	ICT	5.9	Jul-09
	Ngabwe					ICT		
	Mumbwa	Keezwa HC	27.45 323	15.39 011	979	ICT	7.8	Jul-09
	Kabwe	Kasanda HC	28.42 628	14.45 546	1085	ICT	8.9	Jul-09
	Chisamba					ICT		
	Chibombo	Chibombo HC	28.07 662	14.66 336	1067	ICT	3	Jul-09
	Mkushi	Masansa RHC	29.33 724	13.94 235	1266	ICT	2.9	Jul-09
	Itezhitezhi*** (was in Southern Province)	Itezhitezhi Urban clinic	26.03 265	15.73 970	942	ICT	14	Jul-10
Lusaka Province	Kafue District	Kanjawa	28.06 422	15.40 393		ICT	14	Aug-05
	Kafue District	Tukunta	28.01 058	15.40.096		ICT	12	Aug-05
	Kafue District	Chanyanya	28.00 257	15.41 178	977	ICT	30	Aug-05
	Luangwa District	Mphuka-Kavalamanja	30.26 296	15.61 524	376	ICT	40.5	Oct-03
	Luangwa District	Mphuka-	30.30 612	15.42 445	349	ICT	33.3	Oct-03

Province	Name of Implementation Unit	Village	Longitude	Latitude	Elev (m)	Study method	ICT Prev. %	Year done
Southern Province		Janeiro						
	Luangwa District	Chitope	30.21 813	15.18 772	371	ICT	23.8	Oct-03
	Lusaka	Chipata HC	28.29 418	15.07058	1249	ICT	0	Jul-09
	Chongwe	Rufunsa RHC (now in Rufunsa District)	29.63 628	15.08 150	910	ICT	3.9	Jul-09
	Choma District	Moyo	27.31 673	16.98 974	1002	ICT	0	Jul-03
	Choma District	Singani-Batoka	27.15 029	16.46 147	1289	ICT	1	Jul-03
	Choma District	Macha	26.78 837	16.41 929	1155	ICT	0	Jul-03
	Pemba (New from Choma)					ICT		
	Sinazongwe District	Zinazongwe	27.27 024	17.14 890	492	ICT	4.1	Oct-03
	Sinazongwe District	Sinazeze	27.24 285	17.08 706	625	ICT	5.8	Oct-03
	Sinazongwe District	Mweemba	27.17 437	17.27 533	497	ICT	0	Oct-03
	Kazungula	Makunka RHC	25.64 226	17.53 705	1036	ICT	5.9	Jul-10
	Livingstone	Libuyu HC	25.88 339	17.85 350	864	ICT	2	Jul-10
	Kalomo*****	Namyanga	26.48 676	17.06 452	1252	ICT	4	Jul-10
	Zimba					ICT		
	Monze	Njola-Mwanza	27.71 350	16.21 828	1033	ICT	6	Jul-10
	Namwala	Muchila RHC	26.59 770	16.23 548	1071	ICT	5	Jul-10
	Namwala	Chitongo RHC	26.93 000	16.03 740	918	ICT	14.1	Jul-10
	Siavonga	Kanyeke	28.70 300	16.53 838	510	ICT	3	Jul-10
	Gwembe	Munyumbe	27.77 721	16.64 642	618	ICT	8.6	Jul-10
Mazabuka	Cheebea RHC	28.20 423	15.47 190	988	ICT	1	Mar-11	
Western Province	Kalabo District	Nalibutu	22.46 612	14.54 937	1040	ICT	54	Oct-03
	Kalabo District	Kaonga	22.03 246	15.02 092	1014	ICT	50.6	Oct-03
	Kalabo District	Lwandamo	22.34 050	15.16 852	1046	ICT	53.3	Oct-03
	Sesheke District	Malabwe	25.11 667	16.86 667		ICT	1	Aug-05
	Kalabo District	Mulundano	24.70 000	16.51 667		ICT	6	Aug-05
	Kalabo District	Sabasibilo	24.95 000	16.66 667		ICT	7.1	Aug-05
	Senanga District	Itufa-Litiamba	23.18 444	15.51 302	1024	ICT	28	Aug-05
	Senanga District	Kaunga-Lueto	23.01 518	16.04 120	1013	ICT	23	Aug-05
	Senanga District	Shangombo-Kanja Nangweshi	23.19 365	16.23 436	995	ICT	24	Aug-05
	Kaoma	Mayukwayukwa	24.20 901	14.53 846	1068	ICT	14.1	Mar-09
	Kaoma	Mangano Mission Hospital	24.51 148	14.65 716	1127	ICT	2.5	Mar-09

Province	Name of Implementation Unit	Village	Longitude	Latitude	Elev (m)	Study method	ICT Prev. %	Year done
	Kaoma	Shalikumbi village	24.53 582	14.68 649	1135	ICT	0	Mar-09
	Mongu	Nalikwanda-Singonda	33.65 678	15.48 330	1049	ICT	2	Mar-09
	Mongu	Sefula	23.18 617	15.38 395	1034	ICT	6.1	Mar-09
	Shangombo	Nangweshi	23.32 716	16.39 591	1021	ICT	9.6	Mar-09
	Lukulu	Silembe-Kalambwe Chief Imenda	23.25 560	14.26 675	1058	ICT	2.2	Mar-09
LUAPULA PROVINCE	Nchelenge	Nchelenge & Kashikishi RHC	28.73 591	09.34 539	924	ICT	0	Jun-09
	Kawambwa	Makamba RHC	29.05 390	11.26 611	1200	ICT	2.2	Jun-09
	Mwense	Lubunda Chiefdom	28.67 342	10.31 213	927	ICT	2	Jun-09
	Mwense	Musangu village	28.64 948	10.24 702	963	ICT	0	Jun-09
	Mwense	Lukwesa Chiefdom	28.63 603	10.16 891	954	ICT	0	Jun-09
	Chipili					ICT		
	Mansa	Mabumba RHC	29.05 390	11.26 611	1200	ICT	0	Jun-09
	Milenge	Milenge East 7 & Changwe-Lungo	29.48 487	12.41 638	1196	ICT	20.8	Jun-09
	Samfya	Mandubi RHC	29.57 393	11.17 489	1148	ICT	0	Jun-09
	Chiengi	Puta	29.14 726	08.68 780	969	ICT	0	Jun-09
Muchinga	Chinsali District (Was Northern)	Nkweto	32.17 928	10.15 411	1292	ICT	0	Oct-03
	Chinsali District (Was Northern)	Nkula	31.47 982	10.42 993	1342	ICT	0	Oct-03
	Chinsali District (Was Northern)	Chibesakunda/Mulenga	32.09 027	10.59 487	1268	ICT	0	Oct-03
	Mpika (Was Northern)	Mpepo Chiefdom	31.11 665	11.08 051	1256	ICT	3.3	Jun-09
	Mpika (Was Northern)	Nabwalya Chiefdom	31.97 807	12.41 859	549	ICT	3	Jun-09
	Isoka** (Was Northern)	Kampumbu RHC	30.00 820	10.25 592	769	ICT	8.9	Jun-09
	Nakonde (was Northern)	Shemu RHC	32.90 148	09.52 742	1341	ICT	7.1	Jun-09
	Chama District(was Eastern)	Chikwa	32.77 480	11.68 203	685	ICT	0	Oct-03
	Chama District(was Eastern)	Kambombo	33.09 528	11.08 391	732	ICT	0	Oct-03
	Chama District(was Eastern)	Tembwe	32.88 935	11.36 027	675	ICT	0	Oct-03

*Please note that since the mapping of LF prevalence the number of districts in Zambia have increased.

Table 27: Known disease distribution in Zambia – STH

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
Luapula	Chiengi		18.10	Urine and stool analysis	2012	
	Chembe		8.95	Urine and stool analysis	2012	
	Chipili		10.52	Urine and stool analysis	2012	
	Nchelenge		14.00	Urine and stool analysis	2012	
	Mwansabombwe		10.33	Urine and stool analysis	2012	
	Milenge		48.83	Urine and stool analysis	2012	
	Mansa		8.95	Urine and stool analysis	2012	
	Kawambwa		10.33	Urine and stool analysis	2012	
	Samfya		11.83	Urine and stool analysis	2012	
	Mwense		10.52	Urine and stool analysis	2012	
	Lunga		11.83	Urine and stool analysis	2012	
Central	Chibombo		4.17	Urine and stool analysis	2012	
	Itezhi-Tezhi		0.84	Urine and stool analysis	2012	
	Kabwe		1.83	Urine and stool analysis	2012	
	Kapiri Mposhi		30.67	Urine and stool analysis	2012	
	Mkushi		18.33	Urine and stool analysis	2012	
	Mumbwa		2.33	Urine and stool analysis	2012	
	Serenje		16.00	Urine and stool analysis	2012	
	Chisamba		4.17	Urine and stool analysis	2012	
	Ngabwe		30.67	Urine and stool analysis	2012	
	Luano		18.33	Urine and stool analysis	2012	
	Chitambo		16.00	Urine and stool analysis	2012	
Lusaka	Chilanga		19.50	Urine and stool analysis	2012	
	Chirundu		2.33	Urine and stool analysis	2012	
	Chongwe		13.49	Urine and stool analysis	2012	
	Kafue		18.49	Urine and stool analysis	2012	
	Luangwa		21.17	Urine and stool analysis	2012	
	Lusaka		19.50	Urine and stool analysis	2012	
	Rufunsa		13.49	Urine and stool analysis	2012	
	Shibuyunji		4.95	Urine and stool analysis	2012	
Muchinga	Nakonde		21.83	Urine and stool analysis	2012	
	Chama		14.31	Urine and stool analysis	2012	
	Isoka		11.67	Urine and stool analysis	2012	
	Mpika		23.67	Urine and stool analysis	2012	
	Mafinga		11.67	Urine and stool analysis	2012	
	Chinsali		42.68	Urine and stool analysis	2012	

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
	Shiwangandu		42.68	Urine and stool analysis	2012	
North-Western	Chavuma		39.22	Urine and stool analysis	2012	
	Ikelenge		54.65	Urine and stool analysis	2012	
	Kabompo		38.50	Urine and stool analysis	2012	
	Kasempa		49.79	Urine and stool analysis	2012	
	Mufumbwe		37.19	Urine and stool analysis	2012	
	Mwinilunga		54.65	Urine and stool analysis	2012	
	Solwezi		39.43	Urine and stool analysis	2012	
	Zambezi		36.89	Urine and stool analysis	2012	
	Manyinga		36.89	Urine and stool analysis	2012	
Eastern	Chipata		3.33	Urine and stool analysis	2012	
	Lundazi		12.50	Urine and stool analysis	2012	
	Petauke		20.67	Urine and stool analysis	2012	
	Katete		12.81	Urine and stool analysis	2012	
	Sinda		20.67	Urine and stool analysis	2012	
	Nyimba		15.67	Urine and stool analysis	2012	
	Chadiza		16.50	Urine and stool analysis	2012	
	Mambwe		7.83	Urine and stool analysis	2012	
	Vubwi		16.5	Urine and stool analysis	2012	
Western	Kalabo		34.00	Urine and stool analysis	2012	
	Kaoma		37.95	Urine and stool analysis	2012	
	Limulunga		25.91	Urine and stool analysis	2012	
	Luampa		37.95	Urine and stool analysis	2012	
	Lukulu		49.83	Urine and stool analysis	2012	
	Mitete		49.83	Urine and stool analysis	2012	
	Mongu		25.91	Urine and stool analysis	2012	
	Mulobezi		48.52	Urine and stool analysis	2012	
	Mwandi		48.52	Urine and stool analysis	2012	
	Nalolo		32.00	Urine and stool analysis	2012	
	Nkeyema		37.95	Urine and stool analysis	2012	
	Senanga		32.00	Urine and stool analysis	2012	
	Sesheke		48.52	Urine and stool analysis	2012	
	Shangombo		38.67	Urine and stool analysis	2012	
	Sikongo		34.00	Urine and stool analysis	2012	
Sioma		38.67	Urine and stool analysis	2012		
Northern	Chilubi		50.33	Urine and stool analysis	2012	
	Kaputa		24.68	Urine and stool analysis	2012	
	Kasama		34.97	Urine and stool analysis	2012	
	Luwingu		23.45	Urine and stool analysis	2012	
	Mbala		13.00	Urine and stool analysis	2012	

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
	Mporokoso		9.00	Urine and stool analysis	2012	
	Mpungu		19.83	Urine and stool analysis	2012	
	Mungwi		38.17	Urine and stool analysis	2012	
	Nsama		24.68	Urine and stool analysis	2012	
Southern	Choma		8.89	Urine and stool analysis	2012	
	Chikankata		3.17	Urine and stool analysis	2012	
	Gwembe		1.45	Urine and stool analysis	2012	
	Mazabuka		3.17	Urine and stool analysis	2012	
	Kalomo		4.44	Urine and stool analysis	2012	
	Kazungula		2.63	Urine and stool analysis	2012	
	Namwala		2.50	Urine and stool analysis	2012	
	Monze		11.67	Urine and stool analysis	2012	
	Pemba		8.89	Urine and stool analysis	2012	
	Siavonga		2.33	Urine and stool analysis	2012	
	Sinazongwe		3.05	Urine and stool analysis	2012	
	Livingstone		1.17	Urine and stool analysis	2012	
Copperbelt	Zimba		4.44	Urine and stool analysis	2012	
	Chililabombwe		33.41	Urine and stool analysis	2012	
	Chingola		11.80	Urine and stool analysis	2012	
	Kalulushi		20.95	Urine and stool analysis	2012	
	Kitwe		35.17	Urine and stool analysis	2012	
	Luanshya		19.67	Urine and stool analysis	2012	
	Lufwanyama		33.68	Urine and stool analysis	2012	
	Masaiti		16.17	Urine and stool analysis	2012	
	Mpongwe		26.84	Urine and stool analysis	2012	
Ndola		9.50	Urine and stool analysis	2012		
Mufulira		50.70	Urine and stool analysis	2012		

Table 28: Known disease distribution in Zambia – SCH

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
Luapula	Chiengi		38.75	Urine and stool analysis	2012	
	Chembe		26.85	Urine and stool analysis	2012	
	Chipili		29.22	Urine and stool analysis	2012	
	Nchelenge		38.50	Urine and stool analysis	2012	
	Mwansabombwe		7.33	Urine and stool analysis	2012	
	Milenge		50.17	Urine and stool analysis	2012	

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
	Mansa		26.85	Urine and stool analysis	2012	
	Kawambwa		7.33	Urine and stool analysis	2012	
	Samfya		11.50	Urine and stool analysis	2012	
	Mwense		29.22	Urine and stool analysis	2012	
	Lunga		11.50	Urine and stool analysis	2012	
Central	Chibombo		6.50	Urine and stool analysis	2012	
	Itezhi-Tezhi		0.50	Urine and stool analysis	2012	
	Kabwe		3.17	Urine and stool analysis	2012	
	Kapiri Mposhi		8.33	Urine and stool analysis	2012	
	Mkushi		18.00	Urine and stool analysis	2012	
	Mumbwa		4.17	Urine and stool analysis	2012	
	Serenje		3.83	Urine and stool analysis	2012	
	Chisamba		6.50	Urine and stool analysis	2012	
	Ngabwe		8.33	Urine and stool analysis	2012	
	Luano		18.00	Urine and stool analysis	2012	
	Chitambo		3.83	Urine and stool analysis	2012	
Lusaka	Chilanga		26.17	Urine and stool analysis	2012	
	Chirundu		26.17	Urine and stool analysis	2012	
	Chongwe		78.75	Urine and stool analysis	2012	
	Kafue		88.58	Urine and stool analysis	2012	
	Luangwa		67.83	Urine and stool analysis	2012	
	Lusaka		26.17	Urine and stool analysis	2012	
	Rufunsa		78.75	Urine and stool analysis	2012	
	Shibuyunji		4.17	Urine and stool analysis	2012	
Muchinga	Nakonde		1.31	Urine and stool analysis	2012	
	Chama		39.33	Urine and stool analysis	2012	
	Isoka		18.53	Urine and stool analysis	2012	
	Mpika		26.50	Urine and stool analysis	2012	
	Mafinga		18.53	Urine and stool analysis	2012	
	Chinsali		3.53	Urine and stool analysis	2012	
	Shiwangandu		3.53	Urine and stool analysis	2012	
North-Western	Chavuma		32.35	Urine and stool analysis	2012	
	Ikelenge		29.00	Urine and stool analysis	2012	
	Kabompo		18.72	Urine and stool analysis	2012	
	Kasempa		48.45	Urine and stool analysis	2012	
	Mufumbwe		48.99	Urine and stool analysis	2012	
	Mwinilunga		29.00	Urine and stool analysis	2012	
	Solwezi		11.51	Urine and stool analysis	2012	
	Zambezi		49.91	Urine and stool analysis	2012	
	Manyinga		49.91	Urine and stool analysis	2012	

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
Eastern	Chipata		11.58	Urine and stool analysis	2012	
	Lundazi		21.67	Urine and stool analysis	2012	
	Petauke		14.89	Urine and stool analysis	2012	
	Katete		11.40	Urine and stool analysis	2012	
	Sinda		14.89	Urine and stool analysis	2012	
	Nyimba		14.83	Urine and stool analysis	2012	
	Chadiza		26.17	Urine and stool analysis	2012	
	Mambwe		8.33	Urine and stool analysis	2012	
	Vubwi		26.17	Urine and stool analysis	2012	
Western	Kalabo		8.33	Urine and stool analysis	2012	
	Kaoma		17.63	Urine and stool analysis	2012	
	Limulunga		2.27	Urine and stool analysis	2012	
	Luampa		17.63	Urine and stool analysis	2012	
	Lukulu		19.24	Urine and stool analysis	2012	
	Mitete		19.24	Urine and stool analysis	2012	
	Mongu		2.27	Urine and stool analysis	2012	
	Mulobezi		11.67	Urine and stool analysis	2012	
	Mwandi		11.67	Urine and stool analysis	2012	
	Nalolo		8.67	Urine and stool analysis	2012	
	Nkeyema		17.63	Urine and stool analysis	2012	
	Senanga		8.67	Urine and stool analysis	2012	
	Sesheke		11.67	Urine and stool analysis	2012	
	Shangombo		9.00	Urine and stool analysis	2012	
	Sikongo		8.33	Urine and stool analysis	2012	
Sioma		9.00	Urine and stool analysis	2012		
Northern	Chilubi		0.00	Urine and stool analysis	2012	
	Kaputa		21.80	Urine and stool analysis	2012	
	Kasama		0.88	Urine and stool analysis	2012	
	Luwingu		0.46	Urine and stool analysis	2012	
	Mbala		3.00	Urine and stool analysis	2012	
	Mporokoso		1.50	Urine and stool analysis	2012	
	Mpulungu		0.67	Urine and stool analysis	2012	
	Mungwi		5.17	Urine and stool analysis	2012	
	Nsama		21.80	Urine and stool analysis	2012	
Southern	Choma		11.85	Urine and stool analysis	2012	
	Chikankata		3.83	Urine and stool analysis	2012	
	Gwembe		16.12	Urine and stool analysis	2012	
	Mazabuka		3.83	Urine and stool analysis	2012	
	Kalomo		14.15	Urine and stool analysis	2012	
	Kazungula		19.12	Urine and stool analysis	2012	

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
	Namwala		14.72	Urine and stool analysis	2012	
	Monze		2.50	Urine and stool analysis	2012	
	Pemba		11.85	Urine and stool analysis	2012	
	Siavonga		26.17	Urine and stool analysis	2012	
	Sinazongwe		15.42	Urine and stool analysis	2012	
	Livingstone		23.33	Urine and stool analysis	2012	
	Zimba		14.15	Urine and stool analysis	2012	
Copperbelt	Chililabombwe		0.24	Urine and stool analysis	2012	
	Chingola		2.79	Urine and stool analysis	2012	
	Kalulushi		2.36	Urine and stool analysis	2012	
	Kitwe		2.33	Urine and stool analysis	2012	
	Luanshya		1.50	Urine and stool analysis	2012	
	Lufwanyama		1.75	Urine and stool analysis	2012	
	Masaiti		5.67	Urine and stool analysis	2012	
	Mpongwe		4.04	Urine and stool analysis	2012	
	Ndola		0.00	Urine and stool analysis	2012	
	Mufulira		4.36	Urine and stool analysis	2012	

Table 29: Known disease distribution in Zambia – Trachoma

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
Luapula	Chiengi	24 clusters	5	surveillance	2017	
	Chembe	24 clusters	4	baseline	2017	
	Chipili					
	Nchelenge	24 clusters	3	surveillance	2017	
	Mwansabombwe	24 clusters	1	baseline	2016	
	Milenge	24 clusters	4	baseline	2016	
	Mansa	24 clusters	4	baseline	2017	
	Kawambwa	24 clusters	1	baseline	2016	
	Samfya	24 clusters	4	baseline	2016	
	Mwense	24 clusters	4	baseline	2012	
	Lunga	24 clusters	4	baseline	2017	
Central	Chibombo	24 clusters	5	Baseline	2012	
	Itezhi-Tezhi	24 clusters	5	baseline	2016	
	Kabwe	24 clusters	1	Baseline	2016	
	Kapiri Mposhi	24 clusters	6	baseline	2016	
	Mkushi	24 clusters	7	Baseline	2016	
	Mumbwa	24 clusters	5	Baseline	2016	

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
	Serenje	24 clusters	5	Baseline	2016	
	Chisamba					
	Ngabwe	24 clusters	6	baseline	2016	
	Luano	24 clusters	7	baseline	2016	
	Chitambo	24 clusters	4	baseline	2016	
Lusaka	Chilanga					
	Chirundu					
	Chongwe		2	baseline	2012	
	Kafue	24 clusters	2	baseline	2016	
	Luangwa	24 clusters	1	baseline	2012	
	Lusaka		1	baseline	2012	
	Rufunsa					
Muchinga	Nakonde	24 clusters	1	baseline	2017	
	Chama	24 clusters	5	baseline	2017	
	Isoka	24 clusters	2	baseline	2016	
	Mpika	24 clusters	2	baseline	2016	
	Mafinga	24 clusters	2	baseline	2016	
	Chinsali	24 clusters	5	baseline	2016	
	Shiwangandu	24 clusters	5	baseline	2016	
North-Western	Chavuma		2	baseline	2012	
	Ikelenge		9	baseline	2012	
	Kabompo		6	baseline	2012	
	Kasempa	24 clusters	3	impact	2017	
	Mufumbwe		6	baseline	2012	
	Mwinilunga					
	Solwezi		7	baseline	2012	
	Zambezi		3	baseline	2012	
	Manyinga		3	baseline	2012	
Eastern	Chipata		5	baseline	2012	
	Lundazi		4	baseline	2016	
	Petauke		4	baseline	2016	
	Katete		0	baseline	2017	
	Sinda					
	Nyimba		1	baseline	2012	
	Chadiza		2	baseline	2016	
	Mambwe		0	baseline	2017	
	Vubwi		2	baseline	2016	
Western	Kalabo		42	baseline	2012	
	Kaoma	24 clusters	11	impact	2017	
	Limulunga					

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
	Luampa	24 clusters	11	impact	2017	
	Lukulu		15	baseline	2012	
	Mitete		15	baseline	2012	
	Mongu		2	baseline	2012	
	Mulobezi	24 clusters	8	baseline	2017	
	Mwandi	24 clusters	8	baseline	2017	
	Nalolo	24 clusters	13	baseline	2017	
	Nkeyema	24 clusters	11	impact	2017	
	Senanga	24 clusters	13	baseline	2017	
	Sesheke	24 clusters	8	baseline	2017	
	Shangombo		15	baseline	2012	
	Sikongo		42	baseline	2012	
Sioma		15	baseline	2012		
Northern	Chilubi	24 clusters				
	Kaputa	24 clusters	6	baseline	2016	
	Kasama	24 clusters	6	baseline	2016	
	Luwingu	24 clusters	8	baseline	2017	
	Mbala	24 clusters	3	baseline	2017	
	Mporokoso	24 clusters	5	baseline	2016	
	Mpulungu	24 clusters	5	baseline	2017	
	Mungwi		9	baseline	2016	
	Nsama	24 clusters	6	baseline	2016	
Southern	Choma		47	baseline	2012	
	Chikankata		53	baseline	2012	
	Gwembe		47	baseline	2012	
	Mazabuka		0	baseline	2012	
	Kalomo		20	baseline	2012	
	Kazungula		16	baseline	2012	
	Namwala		52	baseline	2012	
	Monze		4	impact	2017	
	Pemba		4	impact	2017	2017
	Siavonga		5	baseline	2012	2012
	Sinazongwe		4	impact	2017	2017
	Livingstone		11	baseline	2012	2012
Zimba		0	baseline	2012	2012	
Copperbelt	Chililabombwe		1	baseline	2016	2016
	Chingola		1	baseline	2016	2016
	Kalulushi		2	baseline	2017	2017
	Kitwe		14	baseline	2015	2015
	Luanshya		1	baseline	2016	2016
	Lufwanyama		2	baseline	2016	2016

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	GPS coordinates of study location
	Masaiti		3	baseline	2016	2016
	Mpongwe		2	baseline	2016	2016
	Ndola		2	baseline	2015	2015
	Mufulira		3	impact	2017	2017

Table 30: Known disease distribution in Zambia – Leprosy

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	Prevalence rate per 10 000 population
Eastern	Chipata		21			0
	Lundazi		17			0
	Petauke		4			0
	Katete		2			0
	Sinda		7			0
	Nyimba		4			0
	Chadiza		0			0
	Mambwe		0			0
	Vubwi		3			1
TOTAL						
Western	Kalabo		5			0
	Kaoma		4			0
	Limulunga		0			0
	Luampa		0			0
	Lukulu		1			0
	Mitete		0			0
	Mongu		9			1
	Mulobezi		0			0
	Mwandi		2			1
	Nalolo		1			0
	Nkeyema		0			0
	Senanga		7			1
	Sesheke		2			0
	Shangombo		12			2
	Sikongo		0			0
	Sioma		5			1
	TOTAL					

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	Prevalence rate per 10 000 population
Southern	Choma		0			0
	Chikankata		4			1
	Gwembe		0			0
	Mazabuka		1			0
	Kalomo		0			0
	Kazungula		0			0
	Namwala		2			0
	Monze		2			0
	Pemba		0			0
	Siavonga		0			0
	Sinazongwe		4			0
	Livingstone		2			0
	Zimba		0			0
	TOTAL					
Copperbelt	Chililabombwe		2			0
	Chingola		8			0
	Kalulushi		0			0
	Kitwe		5			0
	Luanshya		0			0
	Lufwanyama		0			0
	Masaiti		0			0
	Mpongwe		10			1
	Ndola		2			0
	Mufulira		0			0
	TOTAL					
Northern	Chilubi		24			2
	Kaputa		56			6
	Kasama		17			1
	Luwingu		0			0
	Mbala		17			1
	Mporokoso		10			1
	Mpulungu		12			1
	Mungwi		38			2
	Nsama		14			2
	TOTAL					

Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	Prevalence rate per 10 000 population
Central	Chibombo		0			0
	Itezhi-Tezhi		10			1
	Kabwe		11			0
	Kapiri Mposhi		10			0
	Mkushi		13			1
	Mumbwa		12			1
	Serenje		12			1
	Chisamba		24			2
	Ngabwe		0			0
	Luano		4			1
	Chitambo		5			1
TOTAL						
Lusaka	Chilanga					0
	Chirundu		3			0
	Chongwe		0			0
	Kafue		2			0
	Luangwa		0			0
	Lusaka		15			0
	Rufunsa		0			0
	Shibuyunji		0			0
	TOTAL					
Muchinga	Nakonde		8			0
	Chama		6			0
	Isoka		4			0
	Mpika		8			0
	Mafinga		2			0
	Chinsali		6			0
	Shiwangandu		1			0
	TOTAL					
North-Western	Chavuma		2			0
	Ikelenge		1			0
	Kabompo		4			1
	Kasempa		6			1
	Mufumbwe		2			0
	Mwinilunga		4			0

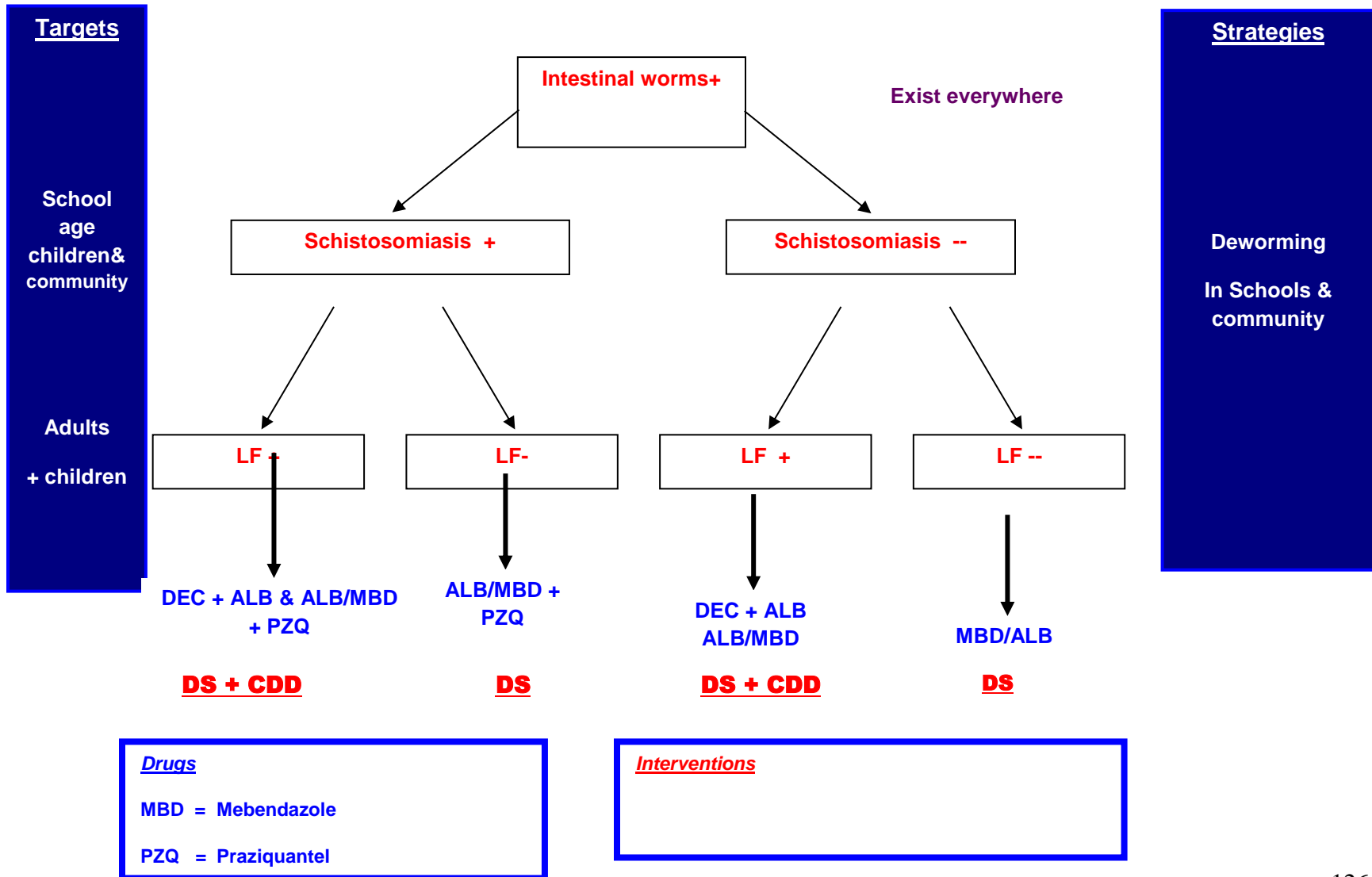
Province or Province or region	District	Location/site	Prevalence	Study method	Year of Survey and reference	Prevalence rate per 10 000 population
	Solwezi		8			0
	Zambezi		8			1
	Manyinga		9			2
	TOTAL					
Luapula	Chiengi		9			1
	Chembe		6			2
	Chipili		7			2
	Nchelenge		11			1
	Mwansabombwe		2			0
	Milenge		14			3
	Mansa		13			1
	Kawambwa		5			0
	Samfya		11			1
	Mwense		0			0
	Lunga		0			0
	TOTAL		614			0

Rabies – Not available at time of reporting

Cysticercosis – Not available at time of reporting

3.4. Coordinated Implementation of PCT

Table 32: Algorithm for coordinated implementation of preventive chemotherapy interventions in Zambia (WHO, 2006)



3.5. Ministry of Health Organogram

Table 33: MINISTRY OF HEALTH FUNCTIONAL ORGANISATION STRUCTURE

CENTRE / HEADQUARTERS

